Teaching
in the
Secondary
School

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TEACHING
IN THE
SECONDARY
SCHOOL

A Revision of

PRINCIPLES AND PRACTICES OF

SECONDARY SCHOOL TEACHING

Contents

Editor's Introduction

Since World War II, increasing attention has been given by parents, educators, and various citizen groups in the functions of secondary education. Questions are being raised concerning what students in junior and senior high schools should learn, why they should learn it, and how they can learn it most efficiently. These questions are of great urgency for a number of reasons. The percentage of youth of school age attending school is increasing and the overall enrollment is rising phenomenally. The school term is lengthening; in some schools it includes the summer months. The average daily attendance continues to rise. Handicapped children are remaining in school through age eighteen rather than being placed in residential institutions. The demand for well-educated, gifted persons is becoming increasingly acute in relation to the supply. Finally, most parents want the school to extend its guidance, vocational, and recreational functions because they are becoming less able to find productive uses for the adolescent's time out of school.

During the same period, research in curriculum, educational methodology, psychology, and sociology has more clearly demonstrated a number of facts related to the role of the school, the teacher, and the learning process. To learn anything efficiently, students must find purpose in their daily activities in school. The curiosity and the desire to learn, especially on the part of gifted students, must receive greater attention. The students' mental health and the learning of self-control must be considered more carefully in order to combat juvenile delinquency and mental illnesses. Group relationships among students in school and among school people and members of the community must be improved to maintain progress in our democratic way of life. A common core of fundamental learnings, along with electives and cocurricular and guidance activities, is

essential for meeting the needs and varying abilities of all youth now attending school. Clearly these research findings point to the crucial role of the teacher as a guide and director of learning in classroom and other school activities, as a counselor of adolescents, as a mediator of our democratic heritage, and as a coöperating member of the school community, the larger community, and the teaching profession.

This volume is addressed to the what, why, and how of teaching adolescents in the secondary school. The purpose is primarily to assist teachers in performing their roles as guides and directors of learning and counselors of adolescents. However, the reader will find indicated here a tangible relationship between teaching practices on one hand and the overall functions of secondary education on the other, for the author presents the teaching practices squarely in the context of the purposes for which the American people establish and maintain junior and senior high schools. Teaching is one of the direct means for helping all youth to develop to their fullest extent as individuals and to assume their citizenship responsibilities in American life.

Dr. Klausmeier is unusually well qualified to write this volume. He is a discriminating student of education, an inspiring and inspired teacher, and a persistent researcher in the fields of teaching and learning. These facts, together with an extended period of professional and personal association with him in a wide variety of relationships, make it a pleasure to present this book, which will be of inestimable help to those concerned with teaching in the secondary school.

JOHN GUY FOWLKES

Preface

PROFESSIONAL INSTRUCTION in junior and senior high schools is the most important service provided to American youth by organized society. Teachers exercise more influence on the course of individual and group life than does any other group of individuals, except parents. Under the leadership of professional teachers, young people develop the understandings, skills, and attitudes which are necessary for adjustment in a rapidly changing world. It is through education that youth learn to control the direction of change for the progress of mankind and to become self-directed citizens in a democracy. Self-direction and socially acceptable participation in a democratic life are learned ways of behaving. High-school teachers have the privilege and responsibility of providing instruction and leadership in the classroom and in out-of-class activities which enable adolescents to acquire these learnings.

This book is addressed to those concerned with educating youth, especially teachers and prospective teachers. Teaching requires an integration of understandings and skills drawn from many sources. A psychologically and socially sound developmental sequence in curriculum and instruction is emerging. This book is organized according to the author's concept of this sequence but is necessarily divided into parts: (I) Bases of Creative Secondary Education (Chapters 1–5). (II) Creative Teaching-Learning Activities: Developmental Sequence (Chapters 6–9). (III) Creative Teaching-Learning Activities: More Specific Emphases (Chapters 10–12). (IV) Expanding Responsibilities and Challenges—Identifying and Providing for the Gifted, Promoting Mental Health and Self-Discipline, Guiding and Counseling, Organizing and Directing Cocurricular Activities, Reporting Pupil Progress (Chapters 13–17). Questions about teaching and learning are raised in each part; and frank, concise, but tentative

answers are provided in the form of principles and related practices. These answers are proposed in the hope that they will be considered only as tentative and that teachers and others will use group discussion, experimentation, and problem solving to find solutions acceptable to themselves.

I thank my students, colleagues, and teachers in service for many of the concrete examples of curriculum, instruction, and guidance practices presented in this book. Their helpful suggestions resulting from using the first edition have encouraged me in this revision. Professor Walter A. Wittich secured most of the pictures which clarify many of the main ideas and visually present the scope of the excellent educational practices in our junior and senior high schools today.

The *Instructor's Manual* contains a short introductory statement, an annotated list of sound motion pictures which may be used with various chapters, and multiple-choice test items. It gives the instructor additional help in making meaningful the learning activities of his students.

I am especially grateful to Professors John Guy Fowlkes and Walter A. Wittich of the University of Wisconsin, and to Dorothy Thompson of Harper & Brothers for their assistance with the final form and style of the book.

HERBERT J. KLAUSMEIER

PART I

Bases
of
Creative
Secondary
Education

WHAT can high-school instruction today provide that will assist youth to develop the understandings, skills, and attitudes necessary to adjust well to their present life situations? How can we help young people acquire the understandings, skills, and attitudes whereby each one of them will attain a reasonable measure of success and achievement in line with his abilities and aspirations? What can we do to prepare them to take their position in the adult world as efficient producers individually and as socially-conscious members of our democratic society? These urgent problems confront everyone concerned with secondary education, especially the classroom teacher.

How important is the teacher today when the world is caught in the conflict between two ideologies: democracy and totalitarianism? How important is the teacher when both what and how the students learn is being debated? How important is the teacher when nearly all the children of high-school age—ranging in IQ from 55 to 200, from great interest to strong disinterest in certain learnings, from well-adjusted to severely disturbed emotionally, from poverty-stricken to exceedingly wealthy—are required to attend school by state law? How important is the teacher when even wealthy communities fail to provide adequate financial support as do some of the states and the federal government?

Because the classroom teacher has face-to-face relationships with his students, he is the key person in rendering educational services both to youth and to society. The destiny of our young people and our society is influenced each day that students and teachers meet in the classroom (Fig. 1.1).

All of us recall, I am sure, the dramatic words with which Winston Churchill, during the Battle of Britain, described the heroic contribution of the pilots of the R.A.F. to the defense of England. "Never before in human history," he exclaimed, "was so much owed by so many to so few."

I suggest that similar words are applicable to the small group—I fear a shrinking proportion—of well trained and highly qualified teachers who, despite the discouraging conditions of the present and the little hope for immediate tangible reward or popular acclaim, are resolved to remain at their posts. Surely, as we contemplate the efforts of these men and women to minister to the edu-

Fig. 1.1. Next to parents, teachers have the most influence on what kind of person the adolescent is now and what he will become later. (Los Angeles, California, City Board of Education.)

cational needs of our young people in ways appropriate to a world still in process of being born, we might say of them, "Seldom before in human history was so much owed by so many to so few." . . .

. . . Consider, for example, the picture as drawn by President Eisenhower in his message to Congress on February 9, 1955: "There is a deficit," he writes, "of more than 300,000 classrooms"; and, again, "Millions of children attend schools which are unsafe or which permit learning only part time, or under conditions of serious overcrowding." [1]

Teachers and teaching are important not only to high-school boys and girls, their parents, and communities throughout the United States, but

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[1] Vivian Thayer, "Today's Challenge to Our Children and Youth," in Association for Supervision and Curriculum Development, *Crucial Problems of Today's Schools*, Washington: National Education Association, 1955, pp. 21-22.

also to the survival and advance of civilization. Thus, prospective teachers, the teachers who are already in schools, and other people in educational positions continuously face six challenges in our junior and senior high schools:

1. How can learning activities which are worth while to all youth and of value to society be provided?

2. How can the wholesome personality development of each boy and girl be assured?

3. How can established principles of learning be incorporated in instructional methods?

4. How can the ideals of democratic living be implemented in instructional methods?

5. How can community resources be developed and utilized more fully to provide for the varying abilities and other characteristics of youth?

6. How can the status and prestige of the teaching profession be enhanced?

To meet these challenges the teacher must be broadly educated, with understandings and skills in a number of subject-matter fields; specialized in at least one broad subject field; and emotionally stable and secure in the face of many and often conflicting demands on his daily professional life.

The modern teacher must play several roles in meeting these challenges. The roles are becoming more clearly defined—a director of learning, a counselor and guidance worker, a member of the school community, a mediator of the culture, a link with the community, and a member of the teaching profession.[2]

This book deals with the challenges, particularly the first five. Like most teachers, you will probably meet one or more of these challenges more adequately than you will others. Perfection is not expected of the teacher in all areas of his professional work any more than it is expected of members of the medical and legal professions or students in the various classes in school. Professional people are expected to give generously of their time and specialized abilities in improving service to society, and

[2] National Commission on Teacher Education and Professional Standards, *Factors in Teaching Competence*, Washington: National Education Association, 1954, p. 4.

this holds equally true for teachers in improving education for children and youth (Fig. 1.2).

As a starting point in clarifying the challenges, we shall examine three major generalizations concerning secondary education:

1. Patterns of secondary education continuously change to meet the needs of youth and society.

2. Goals of secondary education are changing.

3. Goals lead to action.

PATTERNS OF SECONDARY EDUCATION ARE CHANGING

Currently, professional instruction is the greatest service provided our youth by organized government. When we

Fig. 1.2. Teachers give generously of their time to improve education for all of our young people. (Milwaukee, Wisconsin, Public Schools.)

look at the high school of 1900 and compare its enrollment, instructional methods, and organization with those of the present, we discover that the progress achieved in the past half-century represents an outstanding contribution of education toward democratic life in America. The increase in the amount and quality of secondary education is one of the fascinating stories in our history and in the history of mankind.

CHANGING ENROLLMENT IN SECONDARY SCHOOLS

In 1900, most high-school students enrolled in a college preparatory course to acquire the knowledge and skills necessary to enter a college or university. About 10 percent of school-age youth attended high school. About 75 percent of those who were graduated from high school went to college.

Enrollment, fortunately, did not remain static. During each decade since 1900 high-school enrollment has doubled, starting at about 500,000 in 1900 and reaching 4,000,000 in 1930. Over 7,000,000 students were attending public and private high schools in 1940; of those who graduated from high school in 1940 less than one-fourth went to college. Enrollment decreased during World War II. Part of this decrease resulted from the fact that young people were engaged in military and related activities during the war, part from the lower birth rate during the 1930's, and part from the fact that youth found life outside school more attractive than remaining in school to become "educated."

The enormous increase in the number of pupils enrolled in the last four years of the public high schools represents one of the major developments in the growth of the public-school system. While the population of high-school age (14–17 years) increased 66 percent from 1889–90 to 1953–54, enrollments in grades 9–12 (plus postgraduates) multiplied more than thirtyfold. . . . The peak high-school enrollment (grades 9–12 and postgraduate) of 6,714,000 was reached in 1940–41, and then declined to a low of 5,554,000 in 1943–44. . . . Since then the trend has been generally upward. The enrollment of 6,290,000 in 1953–54 represents a postwar high, but is still more than 400,000 under the record number in 1940–41. The greatly increased birthrate since the war will be reflected in much greater high-school enrollments in the second half of the present decade. There is also a continuing tendency for a greater percentage of children of high-school age to attend high school.

. . . There has been a steady trend in the direction of longer school terms. This is illustrated by the fact that the average length of the school term has increased from 132 days in 1869–70, to 173 days in 1929–30, and 179 days in 1953–54. . . . There has also been a continuing trend toward a greater number of days attended by each pupil enrolled. During the ten-year period from 1943–44 to 1953–54, the average number of days attended increased from 148 to 159, an all-time high.[5]

Though the above report shows a postwar high enrollment of 6,290,000 in 1953–1954, the Research Division of the National Education Association estimated an enrollment of 7,175,000 for 1956–1957. The approximate enrollment for that year was 7,820,000—a much higher figure than the previous high back in 1940–1941.[6]

[5] U.S. Department of Health, Education, and Welfare, *Statistics of State School Systems: Organization, Staff, Pupils, and Finances 1953–54*, Washington: U.S. Office of Education, 1956, pp. 10–11. (The figures quoted above include only public high schools.)

[6] Research Division, *Advance Estimates of Public Elementary and Secondary Schools for the School Year 1956–57*, Washington: National Education Association, November, 1956, p. 7.

Two significant conclusions may be drawn from a study of these enrollment figures. (1) In 1900 a few of the more academically inclined and verbally gifted students attended high school, and most of them went to college after graduation. At the present time, students representing the whole range of abilities are attending high school. Most of them do not go to college. (2) High-school enrollments will continue to increase through 1975, and perhaps later if the birth rate continues its upward trend.

CHANGING PATTERNS OF INSTRUCTIONAL METHODS

In the latter part of the nineteenth century instructional method was directed toward imparting knowledge. At that time the mental-faculty or formal-discipline theory of learning was in vogue. It was generally thought that through tough "mental" exercises the faculties of the mind would so develop that boys and girls would be able to meet any of life's problems successfully. High-school teachers, most of them educated in liberal arts colleges or universities, came to the high schools filled with many subject skills but having little understanding of adolescents and the learning process. It is understandable that in their teaching methods they followed the practices of their university professors. Lectures, reading and recitation lessons, and long assignments to be completed outside class were widely used instructional procedures. Mathematics and grammar were emphasized to develop reasoning ability. Long and hard assignments were given to "toughen" the fabric of youth's mental faculties. Drill and memorization of facts were considered of high value in developing memory ability. Discipline was often harsh and severe. Heavy reliance was placed on textbook materials; little attention was paid to community resources.

In the 1890's John Dewey's books and articles began to appear. Writing early in the 1900's, G. Stanley Hall emphasized the nature of the learner. Both of these men stressed understanding the learner as paramount in any teaching method. Dewey insisted that learning is an active, not a passive, process; that the learner must be actively engaged in learning; and that human beings are constitutionally active and want to participate in problem solving. Further, Dewey believed that public-school education should be a fundamental method of social progress and reform; therefore, instructional procedures in the classroom should be focused on helping

the learner develop so that his expressive and creative abilities would be directed toward socially significant ends.

Thorndike, James, and Judd, three great psychologists of the early part of the century, completely disproved the theory of formal discipline. Memorization of difficult and poorly understood materials does not help the learner solve life's problems. No one subject has any more inherent value than any other in developing reasoning power. Whether anything learned in the classroom helps the student solve problems outside the classroom or enables him to develop into a more effective adult depends not only on what is taught but also on how it is taught. Accordingly, in the 1920's instructional procedures began to take into account the child's interests. In short, the child-centered school came into being.

Many experimental instructional programs, based on expressed student interests, were not sufficiently successful to be continued for any great period of time. Some were ineffective because of teacher inability to handle the techniques for such instruction; others, because the colleges and universities continued to require for admission a definite pattern of subjects and subject achievement. Also, it became recognized that an instructional method which utilizes expressed interests of students may not take into proper account their future needs and their responsibilities to society.

The First World War and the great depression of 1929 and the early thirties introduced a new note in the educational world. There was more concern with the importance of the social goals to be achieved through high-school education and with the need to build a unified democratic society. The question of the extent to which instructional procedures should be directed toward individual development as compared to developing the individual for more effective participation in group life became—and remains—a central issue. Group projects involving coöperative effort, group discussions centering on the solution of social problems, and such procedures as student government, field trips, and community surveys indicate the socializing emphasis in instructional method. Techniques to develop better understanding of group living and to promote social interaction skills have become incorporated in the secondary teacher's instructional method (Fig. 1.3).

Along with this changing emphasis in education, technological advances in the production and widespread distribution of printed materials

Fig. 1.3. Promoting social interaction skills is incorporated in the modern teacher's methods. (Atlanta, Georgia, Public Schools.)

and of audio-visual aids to instruction have made it possible to improve classroom instruction. Skill in the efficient use of these materials is now considered important in the professional education of teachers.

CHANGING PATTERNS IN SECONDARY-SCHOOL ORGANIZATION

During the first half of this century the organization of secondary schools underwent many modifications. In 1900 the typical pattern of organization was an eight-year elementary school and a four-year high school. Numerous objections were raised concerning the length of the elementary-school period. In particular, its curriculum and teaching methods were not appropriate for the young adolescents in Grades 7 and 8. The junior high school came into being in the early 1900's, and many of these high schools were organized in the period 1920 to 1930 to include

Grades 7, 8, and 9. Thus the 6-3-3 vertical organization came into existence, primarily to improve instructional services for children thirteen, fourteen, and fifteen years old. This pattern of a six-year elementary school and a three-year junior high school is widespread in cities, although many in which the 8-4 plan was firmly entrenched prior to 1920 still hold to it. Because rural communities with small populations find it impractical to build a separate junior high school, they also continue to use the 8-4 plan.

For the second time in its short history, the junior high school today is experiencing rapid development. The first such period came immediately after World War I, when the junior high school was a new addition to the American school system. Not until the 1920's did the junior high school, however, become firmly established as an administrative unit in the American schools.

As in the 1920's, a tremendous increase is now taking place in elementary and secondary school enrollments. Community after community is engaged in an extensive school building program to meet this increase. Because of its position between the elementary school and the high school, the junior high school frequently provides a ready solution to the pressure of increased enrollments. A time when new buildings are being constructed is, therefore, an appropriate time in some communities to introduce the junior high school plan of organization.

In most communities today, however, the junior high school is much more than a housing convenience. In those communities which are still on the 8-4 plan, many parents who have themselves had the benefits of a junior high school education are demanding a similar educational program for their children. In some communities a separate junior high school is most appropriate to meet the community needs, while in others a combined junior-senior or six-year high school is more suitable. *What is important, however, is that the advantages of the broad program offered in a junior high school type of organization are so widely recognized that most communities faced with building a secondary school today are giving serious consideration to the establishment of a junior high school type of program.*[3]

Shortly after the turn of the century another new institution, the junior college, was organized.

The junior college represents more than a promise for the future. It is a vital present-day reality, a vigorous institution. The first public junior college which is still in existence was founded at Joliet, Illinois, in 1902. Since that

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[3] William T. Gruhn and Harl R. Douglass, *The Modern Junior High School*, New York: The Ronald Press Company, 2nd ed., 1956, p. 1.

date, this new educational agency has multiplied and spread until it currently numbers 595, of which 335 are public institutions and 260 are private. At the close of its first half-century, the number of junior colleges is 40 per cent of the number of four-year colleges and universities in America, institutions which have a history of more than three hundred years. . . .

In addition to its rate of growth, at least two other notable observations should be made about the junior college:

1. A constantly increasing percentage of students is attending public junior colleges. In 1915, only 25 per cent of the junior-college enrollment was in public institutions. In the intervening years this percentage has consistently increased to its present 88 per cent. . . .

2. More than half (59 per cent in 1953–54) of the junior-college enrollment consists of adult and special students. . . .[8]

In reviewing the growth of junior and senior high schools and of public junior colleges just described, we recognize that the need for competent teachers at all levels is also growing. Both the junior high school and the junior college are frequently staffed with teachers who are certificated or licensed as high-school or secondary teachers.

Horizontal organization—the arrangement of the curriculum and instruction in the junior and senior high school and the junior college—is in a state of fluidity. The neat and precise lists of subjects taught in periods of equal length in the high schools of 1890 are now long statements about the various courses which may be pursued in instructional periods of varying length. Major attention is given to this problem in Chapter 5, "Curriculum Patterns and Organization."

GOALS OF SECONDARY EDUCATION ARE CHANGING

Formulating the general goals of secondary education has been the problem of a number of individuals and groups. Many different statements of goals have been drawn up during the past half-century, particularly since 1935; only a few will be discussed here. Since the National Education Association is the professional organization for teachers, selected statements of organized groups affiliated with it or with other large educational bodies are presented in the following order:

1. The Committee of Ten, 1893.
2. The Commission on the Reorganization of Secondary Education, 1918.

[8] B. Lamar Johnson in National Society for the Study of Education, *The Public Junior College*, 55th Yearbook, Chicago: University of Chicago Press, 1956, Part I, pp. 5–6.

3. The American Youth Commission, 1935.
4. The Commission on Secondary School Curriculum, 1942.
5. The Educational Policies Commission, 1944, 1946.
6. The National Association of Secondary School Principals, 1947.
7. The Commission on Life Adjustment Education for Youth, 1945—

THE COMMITTEE OF TEN, 1893

In 1892 the National Education Association appointed a Committee of Ten on Secondary Studies, which in turn appointed nine subcommittees. After one year of study, this committee submitted a report on secondary education[7] in which it stated that the main purpose of secondary schools was to prepare for the duties of life the small proportion of all the nation's children who could profit from education up to the eighteenth year and whose parents were able to support them in school. The committee proposed also that college admission requirements be the same as the requirements for high-school graduation and that secondary schools should not serve solely to prepare boys and girls for college. Apparently the committee intended that the colleges should accept all high-school graduates.

As we saw earlier in this chapter, in 1890 the mental-discipline concept of learning was widely accepted and only a small proportion of school-age youth attended secondary school. The proposal that the purpose of secondary education was to prepare students to meet the problems of life was a very forward-looking statement in 1893. Unfortunately, it was not widely accepted at that time.

THE COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION, 1918

The doubling of high-school enrollment during each decade from 1900 to 1930, mentioned earlier, was accompanied by drastic changes in other fields. There was a rapid shift toward greater centralization of wealth after 1890, the hours of work per week in factories were generally decreased, labor organizations became stronger, and we entered World War I. The need for more secondary schools to accommodate more young people and the need to make secondary education more valuable for students who did not intend to go to college became apparent. These changes and needs led to the formation of the Commission on the Reorganization of Secondary Education in 1913.

[7] *Report of the Committee of Ten*, New York: American Book Company, 1893.

Recognizing these and many other factors which were operating in the American economy, and realizing the future role of public secondary schools in democratic life, the commission, in its statement of goals issued in 1918,[8] proposed (1) that every normal boy and girl be encouraged to stay in school till age eighteen, (2) that the second six years of school be specifically designed to meet the needs of pupils in the age group twelve to eighteen, (3) that free education be extended to the junior-college level, and (4) that education in a democracy be such as would develop in each individual the knowledge, interests, ideals, habits, and powers to find his place in society and to shape both himself and society toward nobler ends. The committee proposed that secondary education focus upon the following cardinal principles: health of the student, the fundamental processes such as reading and arithmetic, home life, vocational preparation, citizenship, wise use of leisure time, and character development.

Family life, citizenship, constructive use of leisure, and character development, in particular, are learning outcomes that are peculiarly related to the role of education in an urban society because in rural society the family assumes major responsibility for them. The commission's statement in 1918 was thus frank recognition of the fact that many of these functions, previously performed by the home and to some extent by the elementary school, should now be performed by the secondary school (Fig. 1.4). Also, this statement suggested that a career in a profession, entered via college and university, was simply one of many useful vocations. In connection with family living and vocational preparation, the Smith-Hughes Act of 1917 made special provisions for education in home economics and agriculture and paved the way for bringing trades and distributive education into the curriculum.

The *Cardinal Principles* received much attention from educators; and many secondary schools extended their curricular offerings, mainly by adding elective courses and by setting up commercial, home economics, agriculture, and shop courses which students might pursue as major areas of study or as electives. In the larger schools particularly, the percentage of students taking the college preparatory course declined, but this course has apparently not yet lost its distinction as the most desirable course to pursue.

[8] *Cardinal Principles of Secondary Education*, Bulletin No. 35, Washington: Government Printing Office, 1918.

Fig. 1.4. The secondary school now assumes many responsibilities previously assumed by the home. (Wilmington, Delaware, Public Schools.)

The great depression brought increasing attention to the crucial role of secondary education in the life of our young people. More parents and other adults became concerned about what could be done for unemployed youth not in school and also for youth in school to prepare them to meet more efficiently the problem of making a decent living for themselves in periods of nation-wide economic distress.

THE AMERICAN YOUTH COMMISSION, 1935

In 1935 the American Council on Education organized the American Youth Commission. This commission, which functioned until World War II, devoted its attention to studying the problems of youth in modern society. The information it brought together clearly demonstrated the necessity for giving more young people the opportunity to attend school

and also for tailoring secondary education to fit better the needs of those already in school. After examining the needs of representative school-age groups, identifying the facilities available to youth in their communities, and helping some communities to experiment with improving their services, the commission published its most important findings in a series of books—*How Fare American Youth, Youth Tell Their Story, Matching Youth and Jobs,* and *Equal Educational Opportunity for All Youth.* These publications, perhaps as much as any others during that period, acquainted teachers with the undesirable effects which quitting school prior to graduation had on youth. To some extent, the commission made us conscious of what good secondary schools might do for our young people, as well as of the serious consequences inherent in allowing young adolescents to quit school and, after squandering their time and abilities on unproductive activities outside the school, finally to drift into a life of wastefulness and unhappiness.

The outbreak of World War II in 1939 and Japan's attack on Pearl Harbor in 1941 created a sudden demand for youth to enter the armed forces. As a result, attention shifted from the demoralizing effect of the depression on young people to preparing them quickly to enter military service.

THE COMMISSION ON SECONDARY SCHOOL CURRICULUM, 1942

In spite of the approximately seven million youth enrolled in secondary schools in 1940, the American Youth Commission, as we saw, found that fewer young people profited from secondary schooling than might have been anticipated. Throughout the 1930's, the responsibilities of each citizen to his government and of government to its citizens were widely discussed, especially in political campaigns. During the same period—a time marked by rapid changes in international affairs, with fascism and communism increasing in strength—many educators and lay persons became concerned with the responsibility of secondary education in preparing youth for democratic citizenship (Fig. 1.5). These and other significant events led to the formulation of the three major emphases in general education: education for more effective citizenship, education for personal adjustment, and education for general vocational knowledge rather than for a specific career or job.

These three emphases were the subject of a report by a committee of

Fig. 1.5. Preparing youth for democratic citizenship is being given increasing emphasis. (San Diego, California, City Schools Photo.)

fourteen educators from the North Central Association's Commission on Secondary School Curriculum, which studied problems of secondary education for a three-year period. Its findings,[*] published in 1942, also gave considerable attention to the problem of organizing educative experiences in high school designed to meet the needs of all school-age youth

[*] North Central Association of Colleges and Secondary Schools, *General Education in the American High School*, Chicago: Scott, Foresman and Company, 1942.

in the local community. The term "general education" was used to describe this kind of education. The three main features of general education in the secondary school are presented in summary form.

1. All youth in the community should attend secondary school. The curriculum, teaching methods, instructional materials, and evaluation procedures should be organized so that each student will profit from the portion of the high-school program of instruction that is intended for all the students. Thus, the educative experiences which constitute the work required for graduation should meet the needs of all young people in the community.

2. General education should be concerned with the whole personality of the student. That is, not only intellectual but also social, emotional, and physical growth, and attitudes and values, should be considered. Courses in both the general education program and the whole school program should emphasize unified experiences rather than mastery of a single subject area.

3. General education fosters learning which is unspecialized so far as vocations are concerned. Its purpose is not to prepare for specific careers in a profession or a trade, for example. Rather, its purpose is to provide the understandings, skills, and attitudes that are closely related to success in various vocations. Educative experiences in the general education program provide each student with many understandings and skills which he will use in daily life regardless of the career he chooses.

It is interesting to note that, in the all-out war effort after Pearl Harbor, our secondary schools went ahead more rapidly than during any previous period with programs to help adults and youth prepare for specific types of wartime employment. In the statements of goals which follow, we shall see that, although the three major emphases in general education are still included, much attention has been directed to job training for young people who must have employment immediately after graduating from high school.

THE EDUCATIONAL POLICIES COMMISSION, 1944, 1946

In 1944 the Educational Policies Commission of the NEA published its now famous book, *Education for All American Youth*.[10] This title soon

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[10] Educational Policies Commission, *Education for All American Youth*, Washington: National Education Association and American Association of School Administrators, 1944. The quotation that follows appears on pp. 16-17.

became a slogan. In the book seven basic purposes of the school were outlined.

All American youth are citizens now; all (or nearly all) will be qualified voters in the future; all require education for civic responsibility and competence.

All American youth (or nearly all) are members of family groups now and will become members of other family groups in the future; all require an understanding of family relationships.

All American youth are now living in the American culture and all (or nearly all) will continue to do so in the future; all require understanding of the main elements of that culture.

All American youth need to maintain their mental and physical health now and in the future; all require instruction to develop habits of healthful living, understanding of conditions which foster health, and knowledge of ways of preventing disease, avoiding injuries, and using medical services.

All American youth will be expected to engage in useful work and will need to sustain themselves and others; all therefore require occupational guidance and training, and orientation to current economic conditions.

All American youth have the capacity to think rationally; all need to develop this capacity, and with it, an appreciation of the significance of truth as arrived at by the rational process.

All American youth must make decisions and take actions which involve choices of values; all therefore need insight into ethical values. Particularly do they need to grow in understanding the basic tenet of democracy—that the individual human being is of surpassing worth.

In *Policies for Education in American Democracy* which the Educational Policies Commission published in 1946, the objectives of secondary education were stated as they had been in 1938 for all education: the objectives of self-realization, the objectives of human relationship, the objectives of economic efficiency, and the objectives of civic responsibility. The first of these is presented to illustrate the breadth and detail of these statements of objectives.

THE OBJECTIVES OF SELF-REALIZATION

The Inquiring Mind. The educated person has an appetite for learning.

Speech. The educated person can speak the mother tongue clearly.

Reading. The educated person reads the mother tongue efficiently.

Writing. The educated person writes the mother tongue effectively.

Number. The educated person solves his problems of counting and calculating.

Sight and Hearing. The educated person is skilled in listening and observing.

Health Knowledge. The educated person understands the basic facts concerning health and disease.

Health Habits. The educated person protects his own health and that of his dependents.

Public Health. The educated person works to improve the health of the community.

Recreation. The educated person is participant and spectator in many sports and other pastimes.

Intellectual Interests. The educated person has mental resources for the use of leisure.

Esthetic Interests. The educated person appreciates beauty.

Character. The educated person gives responsible direction to his own life.[11]

Note that the commission's statement in 1944 emphasized the needs of "all" American youth that should be met in secondary schools. This statement, as you will see from reviewing the statements discussed previously, reflects the work of all the committees and other such groups after 1918. The 1946 statement defines the characteristics of the young people whose educational needs are to be met. It is a description of the individual young men and women who were needed in such large numbers during World War II and thereafter. Many man-hours and ultimately lives were lost in the armed forces because persons were inefficient as individuals; they had not learned to work together in large groups, had not learned to use time and property efficiently, or did not understand the value of putting aside their own wishes and desires in order to help win the war. Many of the rejections and failures in both the armed services and industry that were due to physical defects, mental inefficiency, personality disorders, or antisocial motives might have been prevented if our nation's educational program had been more comprehensive and more adequate. Increased responsibility and perhaps greater faith in the secondary school resulted after the war and the ensuing period of instability.

THE NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, 1947

The National Association of Secondary School Principals is the group most responsible for dealing with matters involving the conduct and

[11] Educational Policies Commission, Policies for Education in American Democracy. Washington: National Education Association, 1941. The four groups of objectives are found on pp. 193, 212, 226, and 240.

goals of secondary education. Vitally concerned with the imperative educational needs of youth as formulated by the Educational Policies Commission, the association conducted a long-term study on what the high schools were doing to meet these needs. A series of ten articles published in 1947 [12] summarized what some 200 schools covered by the study were doing, and in addition made suggestions as to what might yet be done in these and other of our schools.

In reporting on what might still be done, the association reduced the information from all these schools to a statement of ten goals and the practices related to these goals. The goals were stated in the form of the needs of youths that should be met, and are identical with the Educational Policies Commission's statement of needs in 1944. The most important practices were grouped into twenty evaluative criteria for each goal. Thus, a total of two hundred evaluative criteria were provided by which a school or teacher might rate the practices on an experimental basis. This rating is intended to aid in appraising how well the practices were meeting the needs, what remained to be done, and, to a lesser extent, how it might be accomplished.

The ten goals follow, together with eight of the two hundred evaluative criteria to illustrate their meaningfulness to the teacher.

1. All youth need to develop salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life. To this end, most youth need supervised work experience as well as education in the skills and knowledge of their occupations.

a. The school gives continual emphasis to the skills, attitudes, and work habits essential for success in any work situation.

b. Everyone is encouraged to make suggestions for, and to have a part in, maintaining the school property in good condition for use by the whole group.

c. The school provides opportunity within its own environs for practical experience in living and working with adults in their work situations.

d. The school gives the same status to work experiences that it gives to experiences and activities offered as class work.

2. All youth need to develop and maintain good health and physical fitness.

a. Health records of individuals are complete and up-to-date, and pertinent facts are put in the hands of those responsible for any pupil's guidance.

[12] "The Imperative Needs of Youth of Secondary School Age," *Bulletin of the National Association of Secondary School Principals,* March, 1947.

b. The lunch period is conceived as a social hour for unhurried eating, friendly visiting, and pleasant relaxation.

c. Clubs of a nonphysical recreation type are recognized as having mental and health value if they answer social and emotional needs of members.

d. The school encourages student participation in planning, conducting, and evaluating the schools and the community's programs for maintaining and developing good health and physical fitness.

3. All youth need to understand the rights and duties of a citizen of a democratic society, and to be diligent and competent in the performance of their obligations as members of the community and citizens of the state and nation, and of the world.

4. All youth need to understand the significance of the family for the individual and society and the conditions conducive to successful family life.

5. All youth need to know how to purchase and use goods and services intelligently, understanding both the values received by the consumer and the economic consequences of their acts.

6. All youth need to understand the methods of science, the influence of science on human life, and the main scientific facts concerning the nature of the world and of man.

7. All youth need opportunities to develop their capacities to appreciate beauty in literature, art, music, and nature.

8. All youth need to be able to use their leisure time well and to budget it wisely, balancing activities that yield satisfaction to the individual with those that are socially useful.

9. All youth need to develop respect for other persons, to grow in their insight into ethical values and principles, and to be able to live and work cooperatively with others.

10. All youth need to grow in their ability to think rationally, to express their thoughts clearly, and to read and listen with understanding.[13]

These needs were originally formulated by the Educational Policies Commission, an organization that should be better able than any other to determine the functions of secondary education in the United States. The goals are definitely not college preparatory in nature; they imply that secondary schools are for all the young people in every community. We may infer that the teacher who tries to fulfill part or all of these needs should have a broad education rather than specialized study in one subject such as history, or even in one broad field such as the social studies.

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[13] "Evaluating the Curriculum for Provision for Meeting the Imperative Needs of Youth," *Bulletin of the National Association of Secondary School Principals*, April, 1949, pp. 43–69.

The fact that the evaluative criteria were drawn up and officially stated by the National Association of Secondary School Principals is important. Teachers frequently say that they cannot follow sound educational practices in their classrooms because the school administration wants only two things: silence in the classroom and excellent subject mastery by students who will go on to the state university. Some principals may still cling to these two requirements. But unless oral or written administrative statements indicate otherwise, any teacher is correct in assuming that achieving these ten educational needs by any appropriate method will have the approval of the administration (Fig. 1.6).

THE COMMISSION ON LIFE ADJUSTMENT EDUCATION FOR YOUTH, 1945–

The United States Office of Education has become increasingly active since World War II. At a national conference of vocational educators in 1945, Dr. Charles A. Prosser offered a resolution which emphasized the need for life adjustment education for the 60 percent of our high-school pupils who were not preparing to enter college or a skilled occupation. This was the origin of a new term, "education for life adjustment."

Subsequently, many meetings were held by the vocational groups. The idea spread to most of the other educational groups and led to the formation of the Commission on Life Adjustment Education for Youth in 1945.

Fig. 1.6. Individual, small-group, and whole-class activities are appropriate for meeting the needs of young people. (Top, Evansville, Indiana, Public Schools; center, Pittsburgh, Pennsylvania, Public Schools; lower, Pinellas County, Florida, Schools.)

The goals to be achieved in the life adjustment program go little beyond the ten needs just discussed. The literature concerning education for life adjustment indicates that much curriculum reorganization and improvement of teaching methods are needed if the program is to be effective. Supervised work activities are strongly recommended for high-school students. The program has been severely criticized since 1950, though the mental hygiene point of view represented therein continues to be strongly favored, as does the idea of supervised work activities.

GOALS LEAD TO ACTION

"The Imperative Needs of Youth of Secondary School Age" presents the goals of secondary education today as well as can be done in any single statement. For those who prefer to avoid behavioral terms in stating goals, the 1944 statement of the Educational Policies Commission serves well. These statements of goals have led to action in local schools.

Doubt exists, however, whether any one of the current statements is adequate for our many schools, communities, students, parents, and teachers. The change in all phases of life since World War II has brought with it considerable discussion and honest disagreement as to what the goals of secondary education should be. As Cremin says, ". . . There seems every indication that the secondary school, as the pivotal point in the public school system, will be a focus for discussions by citizens and educators for some years to come. As in the period between 1893 and 1918, new social and intellectual currents are calling for new educational outlooks." [14]

This discussion of the various statements of goals and of contemporary conditions undoubtedly leads you to ask: "What particular functions can the high school serve which no other agency can?" And, like others, you may conclude that these functions should be the primary goals of secondary education. Your understandings and skills in your major and minor fields should help you decide some of the goals to emphasize in your class. Assuredly, with modern adolescents being as they are (Chap-

[14] Lawrence A. Cremin, "The Problem of Curriculum Making: An Historical Perspective," in Association for Supervision and Curriculum Development, *What Shall the High Schools Teach*, Washington: National Education Association, 1956, pp. 24–25.

ter 2), the learning process becoming better understood (Chapter 3), our society changing at a continuously accelerating rate (Chapter 4), and the curriculum being critically examined (Chapter 5), you need to think seriously not only about your subject-matter field but also about how it can best facilitate your teaching adolescents the understandings, skills, attitudes, and values that are important in this rapidly changing world. The author's conviction is that a higher percentage of young people will remain in school through the twelfth year and a much larger percentage will go on to either a junior or a four-year college than has been the case in the past. We will have more special classes and programs for slow-learning adolescents and those with other handicaps, as well as for fast-learning, talented students. We will continue to emphasize good education for all our youth, and the content and methods of instruction will be improved to achieve this goal more efficiently. The following is submitted for consideration as a guide to action.

The overall goal of secondary education is to develop in each youth of high-school age the understandings, skills, attitudes, and values essential to a useful life both as a member of various groups and as an individual.

To this end, as community financial resources (Fig. 1.7) and skillful teaching procedures permit, we shall see the following developments. (1) Each student will be assisted in developing fully, ac-

Fig. 1.7. What differences in ability to meet the needs of junior high-school youth are apparent in these two buildings, both in use in 1958? (Top, West Dane County, Wisconsin, Schools; lower, Hunter Douglas Corp., Flexium.)
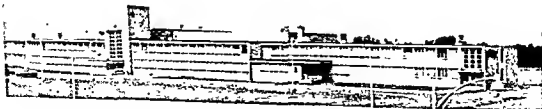
cording to his abilities, any talent he may possess—intellectual, social, artistic, physical. (2) Each student will learn to appreciate his common heritage, his civic rights and responsibilities, and respect for the individual. (3) Each student will learn the requirements for group living, self-discipline, and efficient independent work and study. (4) Each student will be helped, as needed, to develop and maintain good mental and physical health so that he can learn efficiently and live happily with himself and others. (5) Each student will learn the ethical values that are essential to a high level of civilized life, locally, nation-wide, and world-wide. (6) A student of high ability will learn to question our present knowledge critically and will be encouraged to propose and try out novel ideas and inventions, including those pertaining to human relationships and group living.

Better knowledge of subject matter and improved techniques for acquiring understandings and skills will enable teachers to make their particular field more vital and more helpful to a larger proportion of their students in reaching the six goals just stated.

SUMMARY

Teachers make the goals of education come to life for boys and girls in classroom and other school activities. Next to parents, the teacher exerts the most important influence on what kind of person the adolescent is now and what he will become later. Assumption of this responsibility means that the teacher must be competent as a director of learning, a counselor and guide, a mediator of the culture, and a coöperating member of the school, the wider community, and the teaching profession. Understanding the current statements of the goals of secondary education and then formulating goals the teacher can accept himself as a starting point are crucial in determining the what, why, when, and how of teaching and learning—the goals of secondary education.

The sharp difference in the goals stated by the Committee of Ten in 1893 and the cardinal principles formulated in 1918 suggests some of the changes in secondary education during that period: rapidly increasing enrollments, appearance of the junior high school and junior college, changing methods of instruction, and adaptation of the curriculum to meet societal demands. The various statements since 1917 and the present widespread discussion and disagreement about secondary education,

especially since World War II, are evidence that teachers themselves must be prepared to formulate reasonable goals for themselves as guides to action.

Questions and Activities

1. What are the main challenges in secondary education today? What are the characteristics of the teacher who can meet these challenges?
2. List and describe briefly the major changes which have occurred in secondary education since 1890.
3. List and discuss briefly the major differences in the goals of education as formulated by the Committee of Ten in 1893, the Commission on the Reorganization of Secondary Education in 1918, and the National Association of Secondary School Principals in 1947.
4. In not more than two pages, state why the goals of secondary education are currently under consideration by many national and local groups.
5. On the basis of your present knowledge and system of values, outline and discuss briefly the arguments for and against keeping all youth of high-school age in school until they graduate or reach eighteen years of age.
6. Examine the broad statement of goals proposed by the author at the end of the chapter. Criticize it on these bases: its meaning to you, and its completeness as a guide to action. Write no more than one page on each of the main points.
7. Describe briefly the junior or senior high school with which you are most familiar from the standpoint of enrollment and locale; then indicate what you think the major goals of this school should be as applied to your subject-matter area.

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The first concern of the teacher is the boys and girls he is teaching. Before materials of instruction can be organized effectively, he must appraise the nature of the young people who will do the learning. Learning is a process of organizing experiences into meaningful patterns of understanding and action, a process each adolescent must actively take part in if he is to profit from instruction. We do not expect physically inactive and mentally bored students to sit quietly. If the teacher does not plan interesting activities, discipline problems will surely arise. He must guide student activity, mental and physical, in desirable directions. A basic competence in the teaching profession is to understand pupils so that the teacher may direct learning activities well and guide and counsel wisely.

PERSONALITY EMERGES WITH MATURATION

Adolescence is the last stage in the sequence of personality development from immaturity to maturity. During this period certain processes occur—the biological process of obtaining an adult physique, the cultural process of becoming a self-directed contributing member of society, and the psychological process of achieving mental and emotional maturity. The amount of time necessary to attain mature adulthood varies from one culture to another. In our culture this transition from child to adult cannot be expressed in terms of an average chronological age. Growth is continuous and growth periods do not have sudden sharp breaks in which the individual is a child today but an adolescent or adult tomorrow.

From the physical aspect, not the cultural, the period of adolescence is usually marked by two characteristics. It begins when the sex organs start to develop rapidly, with the consequent secretion of sex hormones. It ends with complete maturity of the sex organs and the achieving of adult stature. There is wide variation among children, at least seven years, in the time this development begins. Equally wide is the variation in the time at which physical maturity is complete. When other indexes such as social and emotional maturity are used, the range is appreciably greater.

Our society has tended to induce more rapid physical maturation but at the same time has delayed the achieving of social and economic independence. Our adolescents are dependent upon adults longer than has

been true of any society in the history of mankind. Most of our young people are unable to support themselves, either alone or married, until many years after they have attained physical maturity. It is therefore correct to say that for most youth adolescence extends far beyond the achievement of physical maturity (Fig. 2.1).

Adolescence is not necessarily a period of violent changes or difficulties. Rather it is a period in which dependence upon adults gradually gives way over the years to independence. Many young people find their problems as adolescents no more difficult and no easier than the problems of childhood and early adulthood. This tendency toward orderly development is brought out in the characteristics related to the school life of adolescents, ages twelve to sixteen, as identified by Gesell and his collaborators. These age characteristics provide a rough indication of what a teacher may expect. Gesell, of course, points out that wide variations exist both between the sexes and within a sex with respect to most behavior associated with school life.

Fig. 2.1. Most of these young people in this class for gifted high-school students will not achieve economic independence until after at least four more years of higher education. (New York City Board of Education.)

If Twelve has one outstanding characteristic it is that of enthusiasm. Enthusiasm can be so strong at this age that the child is carried away by it. He will literally be in such a rush that he might even knock down anyone who is in his path. This same 12-year-old enthusiasm can whip up a group to such a boisterous pitch of heated discussion that their teacher may need to step in to quiet them down.

The group is indeed very important to Twelve. His own identity can become lost within the group. . . .

* * * * *

Such adjectives as sophisticated, more inhibited, calmer, conscientious, all give some idea of a real inwardizing change that is occurring at Thirteen years. The rapid, almost pell-mell enthusiasm of Twelve is now withheld and concen-

trated in more organized and sustained eagerness to learn. Thirteen stands off as he watches the antics of the 12-year-olds, chasing each other up and down the halls, snatching any loose pieces of clothing they can grab from each other to produce further chase and interplay. He calls it "kid stuff." He may not chase as he once did, but he jostles any nearby companion and is notorious for his inability to stand in line. He still snatches from classmates, but selectively. He snatches for a purpose, and wallets are the prize, for they document in pictures who is the current favored one.

Thirteen is basically happier in school than he has been. . . .

* * * * * * *

Fourteen is ready for a change, in school as in other things—a sizable change that will satisfy his expansiveness. His decrease in suspicious belligerence especially readies him for new territory. He is quieter within himself, even though, compared with Thirteen, he is both less inwardized, and more noisy with the group. His greater inner quietness is linked with a paradoxical development— an increase in interest in himself, yet a decrease in "self-consciousness." His contemplation of his own personality is becoming less uneasy, dissatisfied, and defensive, more calm and judicious.

Fourteen often seems to bloom forth with new qualities that can make him a definite asset to any school setup he is a part of. . . .

* * * * * * *

When Fifteen expresses a hostile attitude toward school, as he often does, he does not become the easiest person to teach. The very expression "the 15-year-old slump" suggests that an inner change has occurred in Fifteen, that something isn't quite right. Teachers are often surprised by this "slump" and may not take it into sufficient consideration. Many conflicts arise between teachers and students. The rise in drop-outs from school following this year, especially among the boys, indicates the crucial aspect of this year and the failure of the school to meet the challenge. But it is no wonder that teachers speak of Fifteen as an "enigma." Many teachers would welcome any light of understanding about Fifteen or help about ways to handle him.

Fifteens tend to move in groups, almost in crowds, but the clique or close circle of friends may not be as important to him as they were at fourteen. . . .

* * * * * * *

The integrating forces working within Sixteen can make him both a responsive and an interesting person to teach. He often speaks of his junior year as being "better than last year." And he also reports that he is getting a lot out of school.

This is the age when it becomes more evident in what direction he is heading. Those who are interested in college are now ready to buckle down to show that they can do the work, that they can grasp a subject and achieve well in it.

Those who are drawn toward the more active, practical direction desire training in specific techniques of commercial or skilled trades. . . .[1]

The extent of differences in personality, including reaction to school, are clearly shown in a longitudinal study by Rothney; he reported on a random sample of the adolescents in his study. Rothney began his investigation with the students in the tenth grade in 1948; his most recent follow-up of these students was made in 1957. His introductory statements about five adolescents who, mostly ages *seventeen* and *eighteen*, were seniors in 1951, are as follows:[2]

TEDDY

The huskiest boy in his class, Teddy was known to everyone for his prowess with the shot put and discus and as one of the solid blocks in the football line. Uninterested in matters academic and unhappy about "sitting still as much as they want you to do in school," Teddy almost became a drop-out. Several times it appeared that he would succumb to the pleas of his friends to go out west and get away from high school, but he did "sweat out a diploma." When he left after his four years of travail, he was very uncertain about the wisdom of having stayed and about his future. . . .

Six months after graduation Teddy was *working as a hired hand on a large farm*. He liked the work but expected, within the year, to enter the armed forces.

VERA

Vera had a twinkle in her eyes and a smile that radiated enthusiasm for life and living. Nothing, it seemed, would bother her for long, and everything seemed to interest her. Immaculate in grooming, confident, poised, and mature, Vera was pleasant to meet. "A swell girl," one teacher said. "There seems little more to say."

Life was wonderful to Vera, and school was one of the *wonderful things* about life. She liked every subject she took, and only once did she indicate even a least-liked course. . . .

At the time Vera was completing the senior year in high school, she became

[1] Arnold Gesell, et al., Youth: The Years from Ten to Sixteen, New York: Harper & Brothers, 1956. The characteristics quoted are found on pp. 131, 165, 204, 241, and 270, respectively. The entire section on characteristics of the ages ten to sixteen should be read for a more complete understanding.

[2] Reprinted from The High School Student: A Book of Cases, by John W. M. Rothney, by permission of The Dryden Press, Inc. Copyright 1953 by The Dryden Press, Inc. The complete cases of the five students are found on pp. 61-67, 123-127, 183-189, 138-143, and 96-102, respectively. Study of the complete cases is well worth while for both teachers and parents.

engaged to her friend of some years' standing who was being graduated from the university as a teacher of music. Because it appeared that he would soon be drafted into the armed forces, they decided that while he was in the service it would be better for both if Vera took a job instead of going to college. With his savings and her earnings, they thought that they could save enough to start a home when he returned.

JOAN

Joan and her twin were shy little country girls who could never quite get adjusted to the city high school. When called on in class, Joan blushed profusely and kept her eyes glued to the floor. She ended her sentences uncertainly and pleadingly, as if to ask whether what she had said was acceptable and as if to say that she was sorry if it was not. Her grooming and speech improved steadily throughout four years of high school, but at the time of graduation both were still rather unfinished. She had not yet found, for example, a happy medium between too much and too little cosmetics or a satisfactory balance between extremes of too gaudy and too plain dress. . . .

Six months after graduation, Joan was operating a print machine in a machine tool factory. She reported that she liked her job and planned to continue it the next year.

LENA

Lena was a neat, well-scrubbed little girl from a farm who was exceptionally enthusiastic about things agricultural. Nothing in Lena's behavior was put on for effect. . . . Her two greatest disappointments were that she had not done as well in high school as she had in a rural school ("because I spent too much time reading") and that the study of veterinary medicine seemed impossible for her. She was the youngest student in her class, but the adjustments which that situation required were made easily. . . .

A change in family fortunes, attributed to increases in cattle prices, and an opinion by an educator that Lena was not too young for college caused the family to change its plans, and Lena registered in the course in home economics at the state university. She reported that "so far" she liked it very much.

BRAD

Brad was one of three students who were not graduated with their high school class of 220 students. A stuttering, confused lad whose unshaven face, greasy clothes, grimy hands, and dirty fingernails made him the worst-groomed boy in school, Brad began losing contact with reality, lapsed into word-salad language, and deteriorated rapidly in the last two years of high school. Needing sympathy and encouragement, Brad received only abuse, threats, and flunks until he felt so bitter about "this educational clambake" that he wanted to leave

school. When he tried to do so in order to begin an apprenticeship in his chosen work, he found that a high school diploma was needed. Forced back into the school that he hated and into the classes of teachers who, he hoped, might "approach me with something a little bit less deadly than a double-hit axe," Brad stuck out four years of misery in high school. . . .

Six months after leaving school Brad reported that he was doing electrical machine repair work for a local power company. In his second year out of high school he said he hoped to be "specializing on carburetors, speedometers, and magnetos."

Will the boys and girls in your classes show the variations described above? Depending upon the community you work in, you may find greater or lesser variations. In most modern comprehensive junior and senior high schools, the range of interests and attitudes is considerably wider.

A common characteristic of adolescents, as of other human beings, is their continuous interaction in a situation in which they seek certain goals and certain demands are placed upon them. It is out of this interaction that behavior, including learning, takes place. This idea is clarified in the following discussion of the developmental needs of adolescence.

DEVELOPMENTAL NEEDS OF ADOLESCENTS CAN BE MET

"The tasks the individual must learn—*the developmental tasks of life*— are those things that constitute healthy and satisfactory growth in our society. They are the things a person must learn if he is to be judged and to judge himself to be a reasonably happy and successful person. *A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks.*" [8]

This concept of developmental tasks is one of the important contributions in the field of human development. It provides an excellent basis for relating one of the six periods of development—infancy and early childhood, middle childhood, adolescence, early adulthood, middle age, and later maturity—to another in the life span of the individual. According to Havighurst, the developmental tasks of adolescence are the following:

[8] Robert J. Havighurst, *Human Development and Education*, New York: Longmans, Green & Co., Inc., 1953, p. 2.

1. Achieving new and more mature relations with age-mates of both sexes.
2. Achieving a masculine or feminine social role.
3. Accepting one's physique and using the body effectively.
4. Achieving emotional independence of parents and other adults.
5. Achieving assurance of economic independence.
6. Selecting and preparing for an occupation.
7. Preparing for marriage and family life.
8. Developing intellectual skills and concepts necessary for civic competence.
9. Desiring and achieving socially responsible behavior.
10. Acquiring a set of values and an ethical system as a guide to behavior.[4]

The above statement of tasks should be considered by every high-school teacher in relation to the developmental tasks of childhood and adulthood. However, the present author prefers the term developmental needs in relation to high-school education. His experience in teaching junior- and senior-high-school students suggests that during ages twelve to eighteen, every student needs to accept his own physique and physical characteristics, learn new and satisfactory ways for getting along with agemates of both sexes, learn more mature ways for getting along with adults, achieve emotional maturity, make progress toward achieving economic independence, attain intellectual maturity in some degree, and develop a reasonably stable but at the same time flexible philosophy of life in harmony with the values our society generally upholds. These goals must be met if the adolescent is to be happy as an individual and approved by society, and if he is to satisfy adult needs satisfactorily.

UNDERSTANDING AND ACCEPTING OWN PHYSIQUE

With the onset of rapid development of the ovaries in the female and the testes in the male, secondary sex characteristics appear. The most pronounced of these in a girl are the growth of pubic hair, development of the breasts, and widening of the hips. In the boy, pubic hair appears, the voice deepens, the chest broadens, and the beard grows. In early adolescence there is usually a sharp increase in height, weight, and strength in both sexes. Understanding these changes and accepting them as part of the growing-up process is a major need of adolescents because adjustment

[4] *Ibid.* The tasks and further discussion of them appear on pp. 111, 115, 120, 125, 127, 128, 133, 136, 142, and 147, respectively.

problems may arise in these areas concerned with physical maturation: change in size, in proportion, and in function (Fig. 2.2).

Actual *size is important in determining attitudes toward oneself and others.* To have had one's height and weight increase very slowly for many years and then attain adult stature in from one to three years presents many problems. Not to grow when one's classmates do leads to

Fig. 2.2. It is important that adolescents understand and accept their own physique. Which of these girls might experience difficulties in doing so? (Monona Grove, Wisconsin, High School)

greater difficulties. Adolescents may be grouped into four categories on the basis of severity of problems related to size: (1) early developers, e.g., the ten-year-old girl in the fifth grade who begins to menstruate; (2) late developers, e.g., the high-school senior who has not yet begun to shave; (3) boys who at maturity are considerably below the average in height and strength; and (4) girls who at maturity are considerably taller or heavier than the average. The problems of the last two groups are peculiar to our culture, mainly because so much prestige is given to tall, strong athletes in competitive events and to medium-height and slim but shapely girls in popularity and beauty contests.

Change in proportion is closely related to size as far as the developmental sequence is concerned. During early adolescence the arms and legs of both boys and girls grow longer quite rapidly. The boys' shoulders widen and their hips become proportionately slender. The girls' breasts enlarge and their hips widen. The ideals of masculinity and femininity which adolescents have set for themselves are important, for they constitute *possible sources of adjustment problems. The girl whose heritage runs to a tall, heavy, flat-chested figure may isolate herself from the group* after dieting, exercise, and medicine have failed to alter her growth pattern. The short, fat, narrow-shouldered boy and the extremely tall, skinny one face equally difficult adjustments. Nicknames—"Skinny," "Shorty," "Fatty," "Flabby"—are often bestowed in the shower rooms of both junior and senior high schools. They indicate roughly the extent to which adolescents are made aware of *their variations from the ideal.*

Changes in the functioning of organs is another accompaniment of maturation. Sweat glands begin to secrete profusely. The sex organs, here-

tofore dormant, begin to secrete hormones. The processes accounting for the first menstrual period and the first nocturnal emission are hard to understand in themselves. It is difficult for adults to understand the reproductive process, and even more difficult for a youngster fifteen years old. Comprehension of the entire process is important for adolescents. Help in understanding and undergoing these changes in function can be provided in both the home and the school. To neglect this vital need constitutes a serious weakness in helping adolescents develop into normal adults.

An interesting investigation, conducted by Stolz and Stolz,[3] yielded useful information for teachers. Of 93 adolescent boys and 83 girls, they found that 31 percent of the boys and 41 percent of the girls had suffered anxieties concerning their physical development. The six factors which the boys found most often disturbing were small size (particularly height), fatness, poor physique, lack of muscular strength, facial features, and overdevelopment around the nipples. For the girls the six factors were tallness, fatness, facial features, general physical appearance, tallness and heaviness, and shortness and heaviness.

Understanding and accepting their physique is important to adolescents, if for no other reason than because physical development is the basis for other development. Hence to be dissatisfied with one's own physique constitutes a serious adjustment problem and affects that person's development in all other fields.

DEVELOPING SATISFACTORY RELATIONSHIPS WITH AGEMATES

Closely related to acceptance of one's physique is his need to develop social skills so that he can establish good relationships with the opposite sex. Prior to puberty, boys typically associate with other boys, and girls with other girls, in informal groups called "gangs." Frequently the two groups delight in antagonizing each other. Thus, when boys and girls mature and the sex need appears, both have had few previous success experiences in relationships with the opposite sex. They must learn new skills and attitudes if they are to get along with each other in a mixed group, the "crowd" (Fig. 2.3). In learning these new skills adolescents behave somewhat as adults do, except that they have fewer experiences

[3] Herbert R. Stolz and Lois M. Stolz, "Adolescent Problems Related to Somatic Variations," in National Society for the Study of Education, *Adolescence*, 43rd Yearbook, Chicago: University of Chicago Press, 1944, Part I, pp. 86–88.

upon which to draw. We shall use John to illustrate the sequence of learning a new social skill.

John engaged actively in games with other boys throughout the seventh and eighth grades. He was a leader in football games, in rough-and-tumble activities of all kinds. The other boys admired him for his strength and skill; they accepted him as their leader on the playground and in the neighborhood gang.

Toward spring in the eighth grade pubic hair started to grow, and that summer his height increased more than two inches. When he came to school in the fall, he found that the girls, whom he had scarcely noticed before and who he thought were silly, were very different.

Now, for some vaguely understood reason, John wants to know these girls better. What does he do? First he tries the things that worked with the gang of boys; he relies upon previously established patterns of behavior. But these do not work. Obviously he must try something else. He may scuffle with the girls, pull their hair, or pick wool from the sweater of the girl who sits next to him in the classroom. He may even—blushing and perspiring profusely—ask her to meet him after school for a soda.

If he persists in this experimenting and finds that certain tactics lead

Fig. 2.3. The development of satisfactory relationships with agemates of both sexes must be learned. How should a situation such as this be handled? (New York City Board of Education.)

to getting better acquainted, they become part of his behavior pattern until he finds better ones. If he meets with no success, he is likely to do one of two things: become aggressive and take it out on the girls, the teacher, and his other classmates or withdraw from activities, devoting himself to daydreaming or reading pulp literature.

And what have his teachers been doing to help John? When teachers recognize that making a satisfactory adjustment to the opposite sex is a basic problem for adolescents and that young people must solve this problem if they are to derive maximum profit from the academic program, they will provide many opportunities for boys and girls to associate with one another on a friendly basis in the classroom. To rule out this classroom association contributes to maladjustment. The teacher who does not encourage young people to develop social skills in the classroom is placing a social block in the path of adolescent need satisfaction.

Typically, the development of good relations with the opposite sex goes through these steps: (1) Adolescents become interested in the opposite sex, particularly the physical characteristics. (2) They have their first date; this is often a bewildering experience that is accompanied with great anxiety. (3) They have dates with several young people and fall in and out of love frequently. (4) The number of individuals dated decreases and "going steady" is the common pattern. (5) In some cases, a marriage partner is finally selected. All of these are important learnings. The high-school teacher who helps adolescents with these problems is contributing greatly toward the maintenance of better school relations and, ultimately, the developing of a healthy home life.

ESTABLISHING MORE MATURE RELATIONSHIPS WITH ADULTS

As boys and girls mature, they seek greater independence of parents and other adults. The adolescent boy, now taller and stronger than his mother and perhaps also his father, wants psychological freedom from the restraints so long imposed upon him by virtue of his parents' physical superiority. All through childhood his parents have been saying, "You can't drive the car; you can't drink or smoke; these are things you must not do until you grow up."

Now the adolescent boy has reached that age—or thinks he has. Many boys have not, because their parents have not paralleled their sons' growth by changing their attitudes. Loving and wanting to continue protecting

Fig 2.4. Does school government or classroom instruction provide greater opportunity for students to develop mature relationships with adults? (Richmond, Virginia, Public Schools.)

their child, the parents attempt to hold him for a few more years—at least until graduation from high school. To avoid physical violence, they frequently resort to economic measures to keep the adolescent psychologically dependent. Young people whose parents have not given them increasing opportunities to develop independence and self-control frequently react to their teachers as they do toward their parents simply because the teachers also symbolize adult domination. The boy who has been severely rebuked by his father at the breakfast table for reckless driving responds negatively to his teacher who criticizes him for not having prepared an assignment. The girl whose mother has reprimanded her for buying a form-fitting sweater responds negatively to her English teacher's remark that Lady Olivia concealed her beauty with ruffles.

Teaching, especially in the case of adolescents, requires that crises be avoided between teacher and pupil. As in developing new social skills, adolescents need to work out ways to get along better with teachers, parents, and other adults. They themselves feel that they are adults and should be treated as adults; but they do not have the requisite skills, nor do adults give them many opportunities for behaving in a grown-up manner. Adolescents need to establish a new relationship with parents—one that involves mutual affection and respect plus increasing independence

in making decisions. One way in which the teacher can help here is to organize activities which call for adolescents to assume responsibility for their behavior and to exert less and less control himself (Fig. 2.4). A very effective way for him to interfere here is for him to dominate the adolescents and give them no opportunity to establish adult associations with himself or with their agemates.

The common sequence in achieving independence of parents is marked by these stages: (1) As the child approaches puberty he obeys parental commands without much rebellion. (2) Early in adolescence he seeks independence in choosing clothing, friends, and activities. (3) Agemates of the opposite sex replace the parent as the primary objects of affection. (4) This greater freedom and association with agemates makes him feel less need for parental affection. (5) Plans and decisions are made in discussions with parents but are not dominated by them. (6) Economic independence is the final step in gaining full freedom from parental control.

ACHIEVING EMOTIONAL MATURITY

It is often said that a person's behavior in a particular situation is determined more by how he feels than by his knowledge of what to do. The fact that this idea is generally accepted indicates the great need to help adolescents learn how to control their emotions.

Two factors operate during emotion; there is a physiological and a psychological reaction. When a person becomes angry, scared, or highly excited, certain physiological changes occur in his body without voluntary or conscious action on his part. Thus the heart beats faster, the digestive juices, including saliva, cease to flow, blood leaves the visceral organs and goes to the muscles, blood sugar is released from the liver, and the rate of respiration increases. The body uses more energy and eliminates waste at a faster rate. The perspiring palms and forehead, flushed face, greater strength, dry mouth, and trembling limbs that result from these physiological changes are usually called the overt or outward expression of emotion. To a limited degree, this observable expression can be controlled; the inner physiological expression cannot.

The psychological aspect of emotion is described as fear, anger, love, or shame, terms that denote the feeling accompanying the physiological reaction. Psychologically, emotion ranges in intensity from mild to disruptive. Mild emotion tends to stimulate wholesome activity. Frequent

outbursts or prolonged spells of *intense emotion* are harmful to health as well as to efficiency in learning. One does not learn to solve arithmetic problems while extremely angry; one does not do his school work well when very upset by his fear of failing. When an intense emotion like shame or anger is accompanied by a feeling of disorganization or unpleasantness, one usually learns to fear the situation in which it occurred.

When there is a feeling of pleasantness and exhilaration, he experiences enjoyment and tends to try to reproduce the situations in which this feeling occurred. Thus, emotions are motivational forces, serving to direct activity.

Maturing boys and girls, facing problems for which as yet their responses are inadequate, frequently find themselves in situations that involve disruptive emotions. But adolescents are expected not to hit or yell when angry, run when afraid, or cry when ashamed. Attaining emotional maturity demands that they increasingly refrain from relieving emotional tension by outward expression. This in turn means that adolescents must be able to handle situations involving disruptive emotions, for unrelieved tensions which build up and are not expressed outwardly may produce serious maladjustment.

Fig. 2.5. How can teachers aid adolescents in achieving the emotional maturity shown by these young people? (School District of the City of Berkley, Michigan.)

The teacher has an important role in this kind of learning (Fig. 2.5). In the first place, he avoids situations which could produce emotional crises. A flushed face, quavering speech, and trembling knees are warning signals that an adolescent is suffering and should be pushed no further. Belligerent words and gestures directed at the teacher or classmates mean "Stop." Nosebleeds and headaches during examinations indicate acute emotional distress. Teachers are responsible for controlling the emotional atmosphere of the classroom and they should maintain a healthy one.

Classroom activity directed toward assisting boys and girls to develop the following competences will facilitate the attaining of emotional maturity: (1) understanding socially approved methods for relieving emotional tensions and substituting these for childish or otherwise disapproved methods; (2) analyzing emotional situations objectively; (3) obtaining a broader understanding of situations in which disruptive emotions are produced; (4) acquiring many social skills to meet new situations; and (5) eliminating fears and emotionalized patterns of response that are already firmly established.

MAKING PROGRESS TOWARD ECONOMIC INDEPENDENCE

A frequently overlooked need of adolescents is that of acquiring some measure of control over the means of livelihood. Significantly, this is the first of the ten goals listed by the National Association of Secondary School Principals in 1947 (see Chapter 1). Despite the importance thus given it, it is still one of the most neglected areas of secondary education.

As the boy approaches adult size and strength, he is expected—and usually wants—to be economically independent. This is true also of an increasingly higher proportion of girls. Our culture places much pressure on men to be self-sufficient. To be employed and making one's own way is socially approved and worthy of respect, but to be unemployed or dependent upon others for support is degrading. To maintain self-esteem and to avoid guilt feelings, youth need to be self-sufficient, economically, within a relatively short period after completing high school.

Even though economic independence is a mark of success in our society, our business and economic setup makes it increasingly difficult for young people to secure skilled work prior to age twenty-one. State educational and labor regulations, national child labor laws, union rules, and other similar measures have the effect of prolonging the period of economic dependence upon adults. The long college education necessary for certain professions and the long apprenticeship period required for the crafts are further evidence that in many cases economic dependence lasts until the individuals are twenty-five or thirty years old. For the many who cannot be educated by the state or at the expense of their parents, economic independence is extremely important.

Achieving economic independence requires numerous kinds of learning. The most important are (1) understanding one's abilities; (2) knowing the various kinds of work toward which these abilities may be prof-

Fig. 2.6. How should the teacher aid students in acquiring desirable understandings, conduct, and attitude related to work? (Top, Erie, Pennsylvania, Public Schools; lower, Milwaukee, Wisconsin, Public Schools.)

itably directed; (3) developing general skills and understandings which prepare for many types of work; (4) experimenting with different kinds of work; (5) selecting a particular field of work for which to develop special skills and understandings; and (6) spending money and time wisely. Acquiring these learnings requires years. The junior high school is none too early for field trips into the community to explore the various kinds of work by which people make a living, and for club and classroom activities in which students learn to handle their money. The continuation of these activities and work-experience programs in the senior high school are effective in assisting youth with this developmental need.

Teachers should help adolescents to acquire the broad understandings and attitudes necessary in all kinds of work (Fig. 2.6). If all young people were convinced that attending school would enable them to secure such concrete things as better jobs, better clothing, and better homes, few would quit school before graduation. Since parents and specialized vocational counselors cannot do an adequate job of providing needed guidance for every young person, every classroom teacher must assume
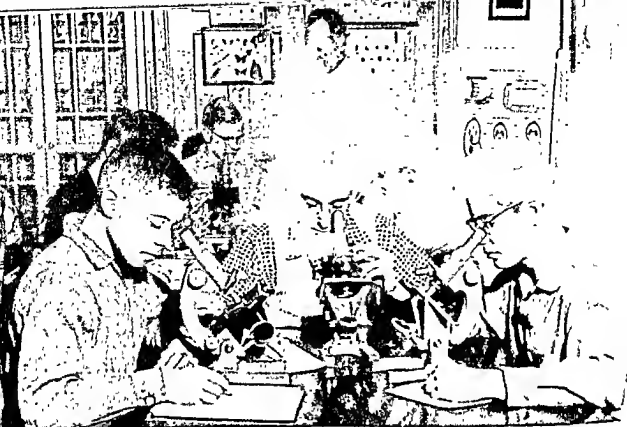
Fig. 2.7. What characteristics must the teacher have in order to be respected and imitated by students? How is this factor related to the students' acquiring favorable attitudes toward the study of science? (School District of Philadelphia.)

interests broaden, this tendency veers away from the glamorous individual toward historical, fictional, and romantic individuals, and toward agemates. When full maturity is attained, individuals are expected to have developed an integrated value system or philosophy of life wherein the goals of life are relatively well established and behavior follows a consistent pattern. Such a philosophy is a mark of maturity and is necessary for maintaining a well-adjusted personality.

Attitudes, values, and ideals are learned; they are not inherited. The high-school student exhibits in his behavior what he has learned in his home, neighborhood, and school. It is vital for the teacher to remember that attitudes are emotionally toned, that prejudices and stereotyped behavior are highly emotionalized, and that ideals become relatively fixed with maturity. Because prejudices and stereotyped behavior are not rationally determined, they are extremely difficult to remove. No presentation of facts will readily change the behavior of the girl who is convinced that manual labor is degrading.

METHODS OF STUDYING ADOLESCENTS CAN BE IMPROVED

Of the many useful techniques available for studying adolescents, only two of the most useful will be discussed here. The sociometric test is particularly useful for understanding group relations and interaction; the case study, for understanding individual behavior.

THE SOCIOGRAM

Many teachers use a sociogram for seating students in a classroom, for organizing students in work groups both in and outside the classroom, and for establishing effective relationships with the group soon after meeting them. Sociograms reveal to the teacher the interaction of the group as a whole, the patterns of friendship, and the kind and intensity of interaction among specific individuals within the group. The popular members of the group, the isolated and rejected members, and the cliques can be identified. When the teacher knows who the most popular members of the class are—there are usually from three to six in classes with twenty-five to thirty-five students—gaining their coöperation will assure him that most of the rest of the class will follow. When the isolated and rejected are located, the teacher knows whom he must help first in making a good adjustment to the classroom.

Administration of the Sociogram

Depending on the purpose of the sociogram, the teacher asks each student to write the names of his best friends in the class, the students he would like to sit next to, those he would like to work with on a class project, or those he would like to work with in out-of-class activities. If the class is large, it is probably wise to ask each student to list three to five names. There is some advantage in placing no limit on the number of choices, for this will reveal more concerning the whole group. The teacher may ask the students to name those they dislike or do not want to associate with in group activities.

The teacher makes sure that the students' choices are not revealed to other students, that they have no opportunity to discuss their choices prior to listing them, and that they do not see the pattern presented by their choices. The following are sample directions using seating arrangement as the basis of choice:
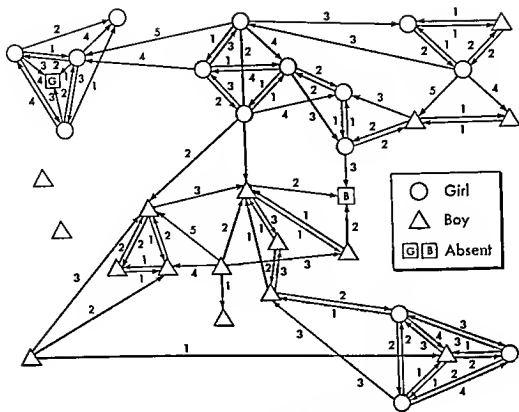
Fig. 2.9. Sociometric diagram of choices.

Thus, a student receiving three first choices, two seconds, four thirds, and two negatives has a score of 29: $15 + 8 + 12 - 6$.

To make the seating arrangement based on the choices more apparent, the choices are diagramed as in Fig. 2.9. In making such a diagram, the teacher starts with the student who was chosen most frequently. Representing boys by a triangle and girls by a circle, he puts the most frequently chosen individual near the center of the paper and draws lines to all the other individuals chosen by him and from all the others who chose him. Arrows indicate the direction of choice; he puts the order of the choice—first, second, etc.—directly above the line and near the center. Rejections are indicated by a different color. The teacher then plots the rest of the class, always grouping the most frequently chosen toward the center of the page and placing mutual choices near each other. Those who have received no choices are placed on the outer edge of the sociogram. Those who have neither received nor made choices are on the outside away from the group so they can be located readily.

Practice is needed to make sociograms. The first one may take two

hours or longer and will require considerable experimentation in placing the symbols on the chart.

The score indicates the intensity and amount of interaction. The students with the highest scores are the most accepted and desired members of the class; those with the lowest, the least desired. If negative choices were requested, with 3 points subtracted for each negative choice received, the lowest score may indicate intensity of rejection; but this is not necessarily true, for one student may receive six first choices and two negative choices for a total score of 24.

The use of triangles for boys and circles for girls makes it possible readily to determine the role of sex as the basis of choice. Except in the case of sex, the sociogram does not reveal why the choices were made as they were. Other information is necessary to find out why particular patterns are present.

The following will be found helpful in interpreting sociograms more fully: (1) Place IQ or achievement scores in the triangles and circles to see if they were determining factors in choice. (2) Find out the racial or national background of the students and the location of their homes, for these may have been a contributing factor. (3) Determine whether a student's physical development or chronological age contributed. (4) Observe the group informally to see whether you can account for the pattern shown by the sociogram.

THE OBSERVATIONAL CASE STUDY

Making an observational case study is invaluable in gaining insight as to cause and effect in adolescent behavior, and it provides a concrete method for studying an adolescent and thereby developing the skill necessary to study other adolescents. Furthermore, most people who have studied one adolescent in this way learn to withhold judgment of other adolescents until they have gathered facts on which to base their opinion.

The following procedure has been found to provide a practical framework for an observational case study:

1. Record under the following headings objective data that are helpful in understanding the adolescent:
   a. Identifying data.

b. Physical development and health status. Growth curve and medical examinations are important here.
c. Home relations with parents and siblings.
d. Relations in the neighborhood, especially with agemates.
e. School record: attendance, grades, and test results.
f. Interests, hobbies, and work experiences.

2. Record significant objective anecdotes.
3. Record sociometric data.
4. Interpret the data in terms of the seven developmental needs of adolescents just discussed and the principles of behavior to be presented in the next section of this chapter.
5. If the data warrant, suggest a plan of action to assist this youth.
6. If it is accepted, put it into effect.
7. Evaluate the effectiveness of the plan.

The following summary of a case study of Ronnie, a tenth-grader, which was developed by the present author and a student teacher in Ronnie's German class, illustrates the above procedure.

RONNIE

Objective Data:

Ronnie, aged 15-8, is a sophomore who lives with his parents and two brothers, ages 8 and 5.

Ronnie is about 5' 3" in height and rather thin. He is one of the smallest boys in the class but also one of the best in physical coördination.

School records indicate good to excellent health throughout his school life. His attendance record shows few absences and he is rarely tardy; his few recent absences and one tardiness were excused.

Ronnie's relationships with his family, according to school records and a short talk with his mother, appear to be excellent.

Ronnie's recent IQ on the California Test of Mental Maturity is 126. In other IQ tests during the period 1948–1956 his IQ ranged between 126 and 144. He ranks at the 97th percentile on the Henmon-Nelson; in two algebra achievement tests this year and last he ranked at the 99th percentile.

Ronnie's school records during the elementary grades show mostly A's and B's. His record as a freshman follows:

	Semester 1	Semester 2
English	C	C--
Speech	C	...
Algebra	A	A
Biology	C	A
Industrial arts	C	D
Band	A	C
Physical education	B	B

Ronnie's present program includes German, geometry, English, band, physical education, and a study period. (Class periods run to about 60 minutes.)

At the end of nine weeks, Ronnie was rated G on both an oral and a written examination in German.

Ronnie recently said that he thought he would probably go to a business college after graduation.

Outside his regular classes, Ronnie plays the clarinet, bowls, and wrestles (he is an excellent wrestler in his weight class). He works part-time caddying for a local country club when the weather permits.

Significant Anecdotes:

At the beginning of the semester, Ronnie, with the third highest IQ in the class, appeared to be a very good student. He showed initiative, interest, and a good grasp of the subject matter being taught. Shortly after the semester began, he and the student teacher had a discussion centering around his statement, "I don't see why I have to take German in order to graduate from here. I don't see how German will help me in business college."

During the ninth and tenth weeks, Ronnie seemed gradually to lose his initiative and his interest in German and to be in something of a state of confusion. He frequently asked, "What does *that* mean?" or just answered a question with "I don't know." Then he would shrink from the situation.

Then he began to disturb the class by chewing gum and doing some reading for another course, whereupon the instructor had to take time to "straighten Ronnie out." Occasionally, after Ronnie admitted he didn't know the answer, the instructor said, "That's all right, Ronnie, you seldom know the answer." This would quiet the boy immediately and he would withdraw from class activities for the rest of the period. This pattern of behavior persisted until very recently.

During the tenth and eleventh weeks, however, Ronnie's behavior has improved. He is now keeping word lists and appears to be more interested.

Sociometric Information:

Ronnie was lowest in this German class in choices received, average in choices made; in his geometry class he was near the top in choices received.

Interpretation:

Ronnie did good work early in the semester; then he did very poorly, dropping far behind the class in oral work, but his behavior is now improving and he is trying to improve his vocabulary. This probably means that Ronnie is capable of doing better in German.

When German became harder for him as the weeks passed by, he may have fallen back on this idea: "German isn't going to do me any good in college, so why work at it?" It is possible, too, that he may experience difficulty in German with this group of classmates, for they are generally excellent students

and most have professional family backgrounds. In spite of his high IQ, Ronnie may continue to experience difficulty with German, even though he makes a consistently good effort. A superior student in mathematics, it cannot be assumed that he will be equally superior in German or science.

Ronnie's need for achieving intellectual maturity is not being met in this class, nor is he making progress in his relationships with his agemates and teachers.

Suggested Plan of Action:

1. Set up a daily goal in the form of his keeping a vocabulary list from day to day.

2. Praise him for his correct answers; avoid negative criticisms.

3. Have him work a half-period each week with Bill, a very able German student.

4. Discuss with Ronnie, and later with his parents, the purpose and value of taking German. Some other language might be better or he might drop languages if he continues to fail.

5. Discuss his after-college plans with Ronnie and also his parents. (Ronnie would probably profit from college if his motivation and achievements in certain subject fields could be somehow related to a career.)

6. Try to get further information from his parents, especially about his work habits and his relations with the younger children.

Besides providing a framework for studying an individual, the preparation of a few observational case studies each year is an excellent means for teachers to keep abreast of the problems of adolescents both in school and in the community. Systematic analysis of such studies enables teachers to attain more professionalism in teaching because they are assured of a better understanding of youth.

ADOLESCENT BEHAVIOR CAN BE UNDERSTOOD BETTER

Ascertaining why a human being behaves as he does is one of our major problems in all aspects of life, particularly in teaching. If we can interpret an adolescent's present behavior accurately, we may be able to predict how he will conduct himself in many situations in the future; accordingly we can direct adolescent learning and conduct along desirable lines.

ACTIVITY IS DIRECTED TOWARD NEED SATISFACTION

Try to hold your breath for two minutes; you will experience a need for oxygen. If you go without eating from breakfast time till late at night, you will experience hunger. As you experience needs such as these, you feel

Fig. 2.10. The tension, ranging from very mild to intense, that is experienced when needs are not satisfied leads to further activity. (Cincinnati, Ohio, Public Schools.)

tension. When you feel tension, you do something to relieve it; thereupon the tension disappears and equilibrium results. This sequence of need, tension, and satisfaction is in accordance with the physiological principle of homeostasis. Psychologists are not completely certain that psychological needs follow this sequence so directly. However, there is little doubt, for example, that when the adolescent wants to solve a geometry problem (Fig. 2.10), he experiences some tension just as the lad does who wants his hot-rod to win the race.

The role of activity in need satisfaction is well brought out in connection with the first two developmental needs of adolescents, understanding and accepting his own physique and developing satisfactory relationships with agemates. The girl who does not understand the phenomena of puberty will attempt to find out about the subject and while doing so will

be under some tension, probably mild. But the tension will continue intermittently until she has all the information she wants. The boy who wants to date a certain girl but does not know how to ask her will experience some tension while he is considering possible ways of approaching her. When he finally asks her for a date and she accepts, this particular tension will cease. In trying to understand a particular activity of an adolescent, we must first ascertain the need he is attempting to satisfy.

ADJUSTMENT PROBLEMS ARISE WHEN NEEDS ARE NOT SATISFIED

As we have seen, unsatisfied needs result in tension ranging from very mild to intense, and normally we actively seek to relieve this tension. If an activity leads quite directly to need satisfaction, no adjustment problem arises because the tension is relieved. However, when the need and tension are not relieved, the individual experiments with different activities. When no activities succeed, an adjustment problem arises, for his need must still be satisfied. At this point professional guidance and understanding are extremely important, for this is the source of most discipline problems. When for some reason, usually controllable by the teacher, students cannot satisfy their needs through socially approved activities, they will turn to other activities which prove successful, regardless of whether their teacher and others approve.

What are some of the factors which block adolescents in satisfying their needs? Physical factors such as insufficient food or water are one kind of block. Other factors constitute social blocks. Thus most restraints upon needs, particularly those of adolescents, are imposed by adults and age-mates. Using unsuitable curricula, requiring students to sit quietly for long periods, taking away privileges, imposing rules and regulations—any of these to which the adolescent cannot accommodate are social blocks. Another factor is the real or imaginary blocks that adolescents find within themselves. The short boy may not make the basketball team; the tall girl may not get dates; the crippled child is so conscious of being different that he may be incapable of normal social relationships. Thus, blocks to need satisfaction are present in the physical environment, in the social environment, and within the individual himself (Fig. 2.11).

The seriousness of any adjustment problem depends on how basic the need is, how longstanding it is, and how aware the individual is of it and the source of the block. In the case of developmental needs, it is often

difficult to analyze these three aspects of another person's adjustment. One of the teacher's most difficult tasks is trying to understand an adolescent well enough to analyze his problems from his point of view. This analysis, however, leads to clearer comprehension of his adjustment problems and his conduct in the classroom, and provides a partial answer to

Fig. 2.31 What blocks to need satisfaction might originate in repeated situations of this type? Which girls may experience the fewest blocks? (Erie, Pennsylvania, Public Schools)

the problem of preventing delinquency and school drop-outs.

ADOLESCENTS ATTEMPT TO SOLVE PROBLEMS INTELLIGENTLY

Most human beings have highly developed neural structures which enable them to reason. They have the capacity for learning how to solve their problems intelligently. How the adolescent uses his intelligence in satisfying his needs depends in part on what he has inherited but more on what he has learned. If as an infant, for example, he learned that only by prolonged and violent crying could he gain his parents' attention, this may be his pattern of intelligent activity. If temper tantrums have gained the desired ends, the temper tantrums will persist. Similarly, if a boy found that he could secure attention from his classmates in the elementary school only by throwing paper wads, this device might be, to him, the most intelligent way of securing attention of his junior-high-school classmates. If a mature woman finds that she can control others by crying, then crying will be her most intelligent response to frustrating circumstances. Difficult as it may be to accept, a person's pattern of behavior in a specific situation is his most reasonable and intelligent response in that situation. This statement by no means denies the fact that emotions and well-established habits are powerful determinants of behavior. It does, however, propose that both emotional and habitual patterns of behaving are learned.

ALL BEHAVIOR RESULTS FROM CAUSE-EFFECT RELATIONSHIPS

Many behavioral patterns can be explained if their causes can be found. The causes of an adolescent's behavior are often difficult to discover, but

the attempt must be made in order to understand him. In some cases psychiatric or medical assistance is required. A fifteen-year-old boy was alert and bright in his morning classes. But in the afternoon he was uninterested and unresponsive, and apparently needed sleep or rest for he had no energy for physical activities. This youth was sent to a physician, who found that he had an allergy to chocolate. When the boy stopped eating chocolate candy for lunch, his behavior in the afternoon improved markedly. There are countless other young people whose conduct seems unexplainable, but the causes therefor can often be found relatively easily by the teachers.

The teaching profession, like the medical, proceeds on the assumption that causes are discoverable. Symptoms are merely indications of underlying causes. Bullying, lying, cheating, destructiveness, and the like indicate that something is wrong, that some need is not being satisfied in a socially approved manner. Merely treating such symptoms as these is futile; but analyzing them to discover and eliminate their causes is the key to preventing and overcoming maladjustment.

SUMMARY

Knowing the general characteristics of adolescence involves understanding the orderly sequence of development which characterizes maturing youth. In addition, the extent of the variability present must be known. Also, because adolescents have a particular hereditary pattern and each one lives in his own environment, these young people differ from one another to some extent.

Providing for the developmental needs of adolescents is a complex task. Although schools and teachers are most directly concerned with aiding the adolescent in achieving intellectual maturity, they must also be concerned with his other areas—accepting his own physique, getting along well with agemates, establishing more mature relationships with adults, achieving emotional maturity, and making progress toward economic independence. If his need in any of the latter areas is unsatisfied, the adolescent experiences tension and is unlikely to learn school subjects well or to behave appropriately in class and in other situations.

Devising methods of studying adolescents both in groups and as individuals is closely related to how well the teacher and other adults have provided for their developmental needs. Sociometry provides a means for

studying large groups quickly, and observational case studies enable study of an individual over a longer period. Because adolescents are members of groups and because groups are so powerful, for example, in determining whether individual members will want to study or loaf in the classroom, as much attention must be given to characteristics and interactions of the groups as to those of individuals. If the teacher can lead a group of adolescents to set high goals of achievement and conduct through a group discussion, for example, most members of the group can be expected to set similar individual goals in order to secure group approval.

A teacher can study the general characteristics and developmental needs of adolescents, and make case studies, and still not understand why these young people behave and learn as they do. The following four principles are useful in interpreting adolescent behavior: activity is directed toward satisfying needs, adjustment problems arise when needs are not satisfied, adolescents attempt to solve problems intelligently, and all behavior results from cause-effect relationships. The tendency to interpret adolescent behavior as stupid, wrong, and unintelligent makes impossible both good understanding and good teaching.

Questions and Activities

1. Discuss how characteristic behaviors can emerge each year an adolescent grows older and yet adolescents of the same age can vary widely.
2. Why is it essential for the teacher to know the characteristics of adolescence?
3. Relate the characteristics of adolescence, as formulated by Gesell, to the discussion of the junior high school in the preceding chapter.
4. Arrange the seven developmental needs in the order in which the school should help adolescents meet them. State briefly why you arranged them in this order.
5. What developmental needs caused you most concern from twelve to eighteen years of age? Which ones did your school help you most with? Which did you have little or no help with?
6. Write the exact directions you would use in administering a sociometric test to group students for (a) physical activities, (b) in-class work activities, (c) out-of-class work activities. Administer one or all three tests and explain the resulting pattern of choices.

7. What information does a sociometric test provide? What information does it fail to provide?
8. Following the suggested framework, make an observational case study of an adolescent or someone else about whom you can secure the necessary information. What difficulties did you encounter?
9. Evaluate the suggested plan of action presented in Ronnie's case study from the standpoint of meeting his developmental needs.
10. Attempt to explain Ronnie's apparent lack of motivation in terms of the four principles for interpreting adolescent behavior.

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How does a student learn typewriting and shorthand well? Under what conditions do boys and girls develop skill in problem solving? Why does one student remember historical events, geometry theorems, correct punctuation, or chemistry formulas, whereas another forgets quickly? Why does one youngster develop socially approved attitudes and values and another become antisocial or personally maladjusted? These and other questions closely connected with teaching practices are considered in discussing eight important principles of learning:

1. Purposeful learning follows a developmental sequence.
2. Motivation is essential to purposeful learning.
3. Direct experience is needed to acquire concepts.
4. Practice is necessary in acquiring skills.
5. Insight facilitates efficient problem solving.
6. Identifying figures enhance the development of attitudes and values.
7. Meaningful learning is retained, and it transfers.
8. Differences in students affect learning outcomes.

These principles apply directly to the students' efficiency in acquiring various learning outcomes. To modify the principles to make them instructional or teaching principles, the first two would be changed, respectively, to read: Organize purposeful learning activities in a developmental sequence; provide continuing, high motivation. More specific instructional principles and applications are brought out in the subsequent discussion of these eight learning principles.

PURPOSEFUL LEARNING FOLLOWS A DEVELOPMENTAL SEQUENCE

A definite sequence is apparent in purposeful learning (Fig. 3.1). At a given stage in maturation an individual is motivated to reach a goal. His motives arise from any one or a combination of four major needs: (1) the need for sensory gratifications, as of hunger, thirst, or enjoyment of music or a football game; (2) the need to explore, as in any new environment; (3) the need for group participation and approval, as in class or other activities involving people of the same or opposite sex or a mixed crowd; (4) the need for achievement, as in any subject-matter area or in any work

or recreational pursuit. The adolescent typically cannot progress toward the goal and satisfy the need directly; hence he feels tension in some degree. Since various methods of reaching the goal seem feasible, he uses both his intelligence and his past experience in deciding which one will probably be most successful. Some of the responses do not succeed, so he discards them. The one that leads to the goal becomes his learned response.

There are five essential features in the above developmental sequence. (1) The individual is motivated; and the goal, which constitutes an incentive to action in a given direction, becomes associated with the motives. (2) He consciously directs his attention toward the goal and expends energy in efforts to achieve it. (3) He engages in intelligent trial-and-error activities to find a new method of reaching the goal or to improve existing methods. (4) He applies previous experiences, differentiating various elements of the present situation in order to perceive an appropriate method more clearly and integrating responses into a new or higher-level response. (5) In this process of differentiation and integration, he discards inappropriate methods, confirms the correct one, and incorporates it into a learned behavior pattern which is available for use in other situations. Mental activity is involved from beginning to end. If he had been able to attain the goal immediately by using only already learned responses, he would not have learned, and his behavior pattern would have remained unchanged. Learning shorthand provides a good illustration of these five steps.

1. The teacher gives each member of the class a shorthand pad and suggests that each student write his initials on it in shorthand so that he will know which pad is his. Although John cannot write his initials in shorthand, his book shows the letters and the corresponding symbols. John wants to do this as the other students are doing. In other words, he wants to master the situation; and the goal—writing his initials in shorthand—is an incentive to action.

2. Now that he is motivated, John gives close attention to the task and is ready to expend energy in guiding his pencil in the proper patterns. The teacher suggests that the students open their pads and practice writing their initials on the first page. John may continue this for five or ten minutes. He learns from his attempts as long as motivation continues.

The learner becomes motivated and sets a tentative goal → Directs attention and activity toward the goal → Makes preliminary trials

Fig 3.1. General sequence in purposeful learning.

3. As John works, he resorts to intelligent trial-and-error activities to find a new way to use his pencil in writing the shorthand symbols or to improve the way he has been writing them. Because he is intelligent, he compares his symbols with those in the book and tries to make them look more like those in the book. The teacher, of course, helps John and the other students whenever they need assistance.

4. John draws on his previous learning experiences. The straight lines, circles, and arcs he has used in regular cursive writing are utilized in the present situation. As he differentiates and sees how the various letters can be made quickly, he learns. As he gains proficiency in writing one letter, he moves on to the next, and soon integrates his learning of the symbols for his initials into a higher-level response. The ability to differentiate and integrate enables him to use previous learnings and to analyze the present situation more adequately. In doing this, he develops a new or improved pattern of action in regard to writing his initials in shorthand. This new learning enables him to write them more quickly than he could in longhand, provided he has learned efficiently.

5. In the process of differentiation and integration (this will be used again later when he learns to join letters into syllables and words quickly and with fewer symbols), he discards inappropriate methods. John and the other students will learn shorthand as long as they are motivated; the skill acquired in the shorthand class can be used in other situations. When he no longer wants to improve, has no further motivation, he will cease to learn. Similarly without motivation many college students fail to improve their handwriting, though they write more each year than during elementary school.

Was John under tension while trying to reach his goal? Undoubtedly, when he could not write his initials well when he first tried to, some ten-

Applies previous learnings to the task - differentiates and integrates → Confirms correct responses; drops inappropriate → Reaches goal. The new or refined response may be used in other situations
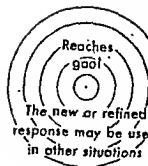
sion was present. It may have been slight or intense, depending on how strongly he wanted to succeed and also depending on his progress. When he writes the initials as well as he and his teacher desire, he is no longer under tension.

Other examples might have been used to illustrate the sequence of purposeful learning—learning to drive a car, decorate a bulletin board, understand a principle of physics, make an introduction, make a report to a class, or solve a problem by means of geometry.

While John was learning to write his initials in shorthand, he may have acquired other learnings without having any specific goal in mind. Not all learning outcomes are acquired with a definite goal in mind; some are acquired by giving the situation close attention, others, by conditioning. Thus, besides learning to write the symbols, John, by attending closely to the task, may have learned that a sharp pencil is requisite for writing shorthand, that the lead in his pencil was too soft or too hard, that the spacing between the lines of the pad was just right.

If his teacher helped him overcome difficulties, praised him as he made progress, and was courteous to him, John probably acquired a favorable attitude toward the specific learning task, toward shorthand in general, and toward the teacher. His motivation to continue will probably also be higher. But if his teacher did nothing to help him, nagged him for being slow to improve, criticized him for messy work, told the class that he did poorly, John would develop unfavorable attitudes without any conscious purpose for doing so. Undoubtedly no teachers purposely attempt to influence an adolescent unfavorably toward a specific task, a subject field, or themselves. Even so, the student is conditioned by the teacher's relations with him and with the other members of the class (Fig. 3.2). When young people feel that they are making progress on important learning

tasks, are comfortable with one another and their teacher, favorable attitudes develop. When relationships and learning progress are poor, unfavorable attitudes develop.

Thus purposeful learning follows a sequence, but favorable or unfavorable attitudes may develop, depending upon how the teacher manages his students and the learning situation.

Fig. 3.2. How the teacher manages the learning situation is closely related to the attitudes students develop. (Los Angeles, California, City Board of Education.)

MOTIVATION IS ESSENTIAL TO PURPOSEFUL LEARNING

The seven developmental needs of adolescents were discussed in Chapter 2. These needs and others experienced by human beings at various ages are closely associated with four motives that are present in us

at varying levels of intensity from birth to death. These motives are as follows: to experience sensory gratification, to explore the self and the environment, to participate in and receive social approval, and to achieve.[1]

Consider your own activities during the past week. What have you done to achieve sen-

Fig. 3.3. What combination of motives might be used in this activity? (Hillsborough County, Florida, Public Schools.)

sory gratification—activities in connection with seeing and hearing for pleasure, tasting, resting because of feeling tired, and the like? What ideas, places, phenomena have you explored, simply because you wanted to find out? What have you done to gain the approval of your roommates, classmates, instructors, parents, brothers and sisters, minister, housemother? What aspects of yourself and your environment, including textbooks and assignments, have you tried to master?

The high-school teacher who can identify and intensify these motives in learners both in the classroom and in other situations has gone far in setting up an excellent learning situation. Usually, a combination of motives is essential to stimulating many members of a group to purposeful learning (Fig. 3.3). For some adolescents the exploration motive is strong; for others, it is social approval; for still others, it is achievement or sensory gratification.

We now compare the use of various incentives as means of motivation.

REWARDS AND PUNISHMENT AS INCENTIVES FOR LEARNING

With some adolescents, rewards serve as incentives for learning. If a class is told that by completing a certain number of problems the first four days of the week, they can use the period on the fifth day to discuss the films they have seen lately, those who enjoy discussion and have seen some films will do the problems. But what about the following week? Will they work the whole week without the discussion period? Probably not. Instead they may want to discuss films during the last two periods.

[1] Herbert J. Klausmeier, "Characteristics of an Effective Learning Situation," *Teachers College Journal*, October, 1958, pp. 1–4.

Rewards that are used as incentives for learning must be increased progressively if they are to serve continuously in this way.

Further, the student may reach the point where the reward itself becomes more important than the learning. A father promises his son a new convertible when he graduates. Under such circumstances, the lad will undoubtedly work hard in order to graduate; he may even learn to cheat if necessary.

Usually rewards are given for a definite standard of performance and are awarded only to those who achieve the standard. But when the standards are so high that only a few can win a reward, the others get discouraged.

Three serious objections to using rewards as incentives are thus apparent. (1) Rewards must be increased progressively to serve continuously for motivation. (2) The reward itself may become more important than the learning. (3) Rewards do not provide an incentive for those who can never win them.

Punishment and threat of punishment may also serve as incentives for learning and as deterrents to undesirable behavior. Students may memorize a certain number of lines of the Constitution to avoid staying after class. A boy may stop carving initials on his desk to avoid being sent to the principal's office. A student may stop cheating to avoid being given a zero on the test or an F in the course. We now examine such punishments in order to determine their effect in the classroom.

When threat of punishment is employed, the teacher sets up a standard to be achieved and states the punishment to be inflicted if it is not met. He must police the classroom to make sure that the work is being done and the punishment bestowed when necessary. Doing these three things requires the teacher's attention and effort, and leaves him less time to help the students master the work. The teacher must center his attention *on seeing that all do the work, for threatened punishment is meaningless* unless punishment follows when the work is not done.

In a punishment situation, the teacher gives the students a choice of two ways of acting, neither of which they desire; obviously, no threat would be necessary if the students wanted to do the work. Because the students have different attitudes toward the punishment, the teacher cannot predict which one will be chosen; thus, their conduct becomes unpredictable. Which will a student choose: staying in for fifteen minutes

during lunch hour or preparing and presenting a five-minute oral report on the spoils system under Andrew Jackson?

Boys and girls try to escape from unpleasant situations that are forced upon them and over which they have no control. When presented with two unpleasant situations, they resort to evasion and develop undesirable attitudes. Some drop classes; some form a deep dislike of the teacher, the subject, the school, and the whole educational process. Others become truants; some who are legally old enough to quit school, do so. Others become mental truants, daydreaming and using other escape mechanisms, accepting the punishments as part of what they have to go through to graduate.

Although neither rewards nor punishments are desirable as incentives for learning, rewards have four distinct advantages over punishments. (1) Rewards require less policing than punishments, thus giving the teacher more time to help his students in learning. (2) Rewards lead to more predictable results, for a student is likely to do an unpleasant task in order to receive something he desires. (3) Rewards lead to fewer personality conflicts and maladjustments because the student is free to choose between doing the task and not receiving the reward; there is no need for escape mechanisms. (4) Rewards may create liking for the task because of the association between the pleasantness of receiving the reward and doing the work.

Also interesting in this connection is the fact that Thompson and Hunnicutt found that praise had more desirable effects with introverts, whereas with extroverts reproof was more powerful than praise.[2]

SUCCESS AND FAILURE

Widespread use of rewards and punishments is not necessary in getting the work accomplished in the secondary school. Boys and girls behave without threats and cajoling; they work industriously on tasks related to the sensory gratification, exploratory, social approval, and achievement motives. They are greatly concerned about doing things successfully. They and their teachers must coöperate in organizing learning activities based on these motives.

When students are given the opportunity to decide about work pro-

[2] George C. Thompson and Clarence W. Hunnicutt, "The Effect of Praise or Blame on the Work Achievement of 'Introverts' and 'Extroverts,'" *Journal of Educational Psychology*, 1947, pp. 257–266.
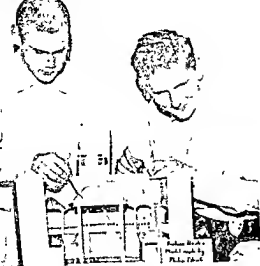
cedures in any classroom activity, that activity becomes important to the point that the student wants to work and feels successful if he reaches his goal. The teacher sets the stage by providing a variety of interesting projects that will help the student set goals in line with his abilities and interests.

ESTABLISHING GOALS

When, under the teacher's guidance, the pupil sets a goal, the possibility of success or failure is present. Usually he tries to set goals which he wants to achieve and will work for. With achievement, he consciously experiences a success feeling (Fig. 3.4). When the teacher arbitrarily sets the goals without giving the student any opportunity to share in this, the student is not so vitally concerned because he is doing work passively, not actively. The goal is not his goal. When the teacher sets a goal without regard to the different aptitudes and achievements of the pupils, there is little opportunity for success or failure for many because the task for some is too difficult and too easy for others.

Fig. 3.4. Knowledge of progress toward goals and of goals achieved leads to feelings of success (Toledo, Ohio, Public Schools.)

A goal is too difficult when it is unquestionably impossible of achievement and presents no challenge to the student. For example, if a beginning class in Spanish is assigned two hundred words to memorize, no one will succeed because the task is too difficult. Twenty new words may be far too many for some individuals.

A goal is too easy when it can be achieved so easily that the pupil does not feel he has accomplished anything worth while. Asking a sophomore class to spell a list of twenty fourth-grade words offers no possibility of failure because the task is far too easy.

When the student shares in setting goals, he tends to make them neither too easy nor too difficult. If he has set too high a goal originally, he lowers it; conversely, if he has set it too low, he raises it. Although students vary widely in ability to set realistic goals, generally the goals they set after some preliminary practice are more realistic than those the teacher might set for them. Pupils and teacher together can work out challenging

goals that offer each student some possibility for success. Feelings of success are important; in fact, a background of success experiences is the best equipment one can have to meet occasional failure.

KNOWLEDGE OF PROGRESS

Closely related to feelings of success is knowledge of progress. To realize that one is approaching a goal tends to keep his effort centered on activities leading in that direction. Conversely, the absence of a feeling of progress destroys the initiative for further effort. If progress is not measured at intervals, the student can have no valid idea of where he is and consequently feels neither success nor failure in relation to particular activities.

Knowledge of progress means more than one or two examinations during the reporting period. It means that the student formulates procedures whereby he measures progress, discovers and eliminates his errors, and thus achieves a higher level of performance. Teacher examinations are of great value in this process when they have this objective rather than being designed to grade all the students with one measuring stick.

Self-measuring devices give excellent results in providing continuous motivation in the classroom. In beginning a foreign language, for example, if each student keeps a chart of the words learned each day or week he will have a cumulative record of his progress. Similarly, in a geometry class, charting the number of problems solved or the number of correct solutions gives a graphic record of progress. Keeping a record of the number of words written per minute on weekly speed tests in typing or shorthand provides an incentive for increasing the speed.

This kind of self-measurement has distinct advantages over teacher examinations because it gives each student an opportunity to experience success. The student who increases his typing speed by only three words per minute during the month can see that he is making progress, even though he rates the lowest in the class. This knowledge makes him more likely to continue trying to improve, than if he had no such record of progress and received a D or an F for his work that month.

DIRECT EXPERIENCE IS NEEDED TO ACQUIRE CONCEPTS

Concepts are meanings attached to words, other symbols, and their interrelationships. Words and other symbols have meaning and enable

individuals to understand one another to the degree that people attach the same or a similar meaning to the same word or symbol. Thorndike wrote thus about concepts:

Meanings are in persons' minds, not in words, and when we say that a word has or possesses such and such meanings, we are really saying that it has evoked, or caused, those meanings. Until it gets into a mind, a word is only *puffs of air* or *streaks of ink*. What a word, sentence or other expression means to a hearer or reader is mainly what it makes him think or feel or do as a fairly direct consequence of hearing or seeing it, and, more narrowly, what it makes him think, or think of, as the direct and almost immediate consequence of hearing or seeing it.[3]

The development of concepts and generalizations has a prominent place in many subject fields in secondary instruction. Much of the learning in the social studies, science, fine and applied arts, and literature involves the meaning of words, facts, and relationships and their effective use in a variety of new situations. New concepts help meet new situations.

Fig. 3-5. How does this activity facilitate the learning of concepts? (Dallas, Texas, Independent School District.)

Too often in high school, as well as in college, teachers attempt to aid students formulate concepts entirely by means of verbalizations in question-and-answer recitations and group discussions, or by reading textbooks and other materials. The teacher assumes that the pupil has had sufficient direct experience with what the words represent and therefore needs no direct experience with the concept. But the students' direct experience with such concepts as democracy, communism, autobiography, atom smasher, perspective, poverty, and illiteracy is often too restricted for verbalizations to be solely depended on to produce

[3] Edward L. Thorndike, "The Psychology of Semantics," *American Journal of Psychology,* October, 1946, p. 613.
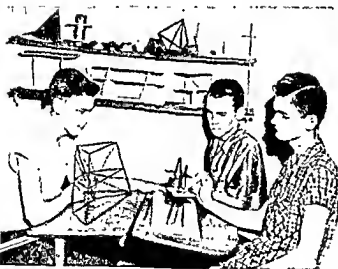
meaning (Fig. 3.5). It is obviously impossible to provide direct experiences with all concepts, nor do all students need the same amount of such experience. Nevertheless, the teacher should facilitate the students' learning of the few major ideas or concepts to be treated each week by providing as realistic experiences with them as possible, giving clear explanations, and introducing new concepts in appropriate numbers—not too many in too short a time. Much of the abuse and direct misuse of words that everyone is guilty of could be prevented if the high-school teacher carefully examined the adequacy of his own concepts and also identified the particular concepts in the work each day that students might have difficulty with.

PRACTICE IS NECESSARY IN ACQUIRING SKILLS

Instruction in high school is often directed toward helping students develop higher-level motor skills such as using the typewriter and other machines in commercial classes; using tools and various materials in home arts, crafts, and industrial arts classes; or achieving a higher level of bodily coördination and precision in physical education classes. Knowledge of map reading and the use of reference books, of punctuation and capitalization, of problem solving, of conducting an experiment, and the like indicates the wide variety of skills considered important in the high school. To achieve a high level of perfection in any of the skills requires active practice with guidance.

We shall now discuss skills in more detail in connection with kind of practice, length and spacing of practice periods, whole-part-whole sequence, and diagnosis of performance and guidance of practice.

KIND OF PRACTICE

The kind of practice required for improvement is that which the learner realizes he needs and which he does in accordance with correct procedures. Repetition is purposeless and even harmful unless it follows an increasingly meaningful and efficient pattern. Repeating mistakes leads to habitual erroneous responses. The meaningless repetition of a poorly understood concept—democracy, for example—does not lead to as good an understanding of it as one concrete experience in democratic living would. The "hunt-and-peck" system of typing, the "dog paddle" in swimming, the "painting" of ready-made outlines, and the movement of lip

or finger in reading are examples of incorrect procedures that have been repeated until they have become habitual.

Learning is encouraged when the student sees the need for practice so that he does not become bored and frustrated, when he uses correct procedures and eliminates the incorrect before they become firmly established, and when the teacher clearly understands and can demonstrate effective performance.

LENGTH AND SPACING OF PRACTICE PERIODS

The amount and distribution of the time spent in practice require a great deal of experimentation in the classroom to find the optimum. Generally, distributed practice yields better results than massed practice. Suppose a group of tenth-grade students had four hours per week that were to be spent in public speaking, for example. Would it be better to plan the practice time in two two-hour periods, in four one-hour periods, or in eight thirty-minute periods? The latter would probably produce best results; however, no one choice is entirely justified because the optimum length and spacing of practice periods depend upon the particular subject and the range of differences in the students. Different levels of development also influence the optimum length of practice periods. Short, frequent periods are apparently more effective in the early stages of learning; longer periods at less frequent intervals seem to produce satisfactory results at advanced levels.

WHOLE-PART-WHOLE SEQUENCE

In teaching motor skills, the entire skill and its component parts must be analyzed in terms of the student's level of development. Ordinarily, the pupil should practice the whole skill before he commences practice on parts of it. In swimming, for example, doing arm, leg, and breathing exercises yields poorer results than commencing with swimming underwater, floating, and surface swimming (whole movements). Even though a beginner has good arm and leg movements and can breathe in the water while holding to the side of the pool, he cannot swim until he has coördinated these various movements into the act of swimming. As in swimming, so in other areas; the adolescent first practices and gets an idea of the whole skill, concentrates on the various parts as necessary, and then integrates the parts into a unified whole (Fig. 3.6).

What should be considered a part and what a whole is under question in many areas of high-school learning. What is the whole unit in shorthand? A letter, a word, a phrase, a sentence, a paragraph? Probably, the student should start with words or phrases, practice individual symbols as much as necessary, and go on to sentences and paragraphs as soon as he has learned enough symbols. He would again practice letters, combinations, and phrases as needed.

DIAGNOSIS OF PERFORMANCE AND GUIDANCE OF PRACTICE

When students start practice in any skill, one of the teacher's main tasks is to diagnose their performance. A very important part of this diagnosis involves pointing out incorrect responses early and helping the student eliminate them. It is also im-

Fig. 3·6. Active practice of the whole skill is needed for efficient learning. When should students concentrate on practicing the various parts? (Top, Atlanta, Georgia, Public Schools; lower, Des Moines, Iowa, Public Schools)

portant for the pupils to feel that they are making progress. Because they are eager to correct their errors, boys and girls do not object to the teacher's pointing out mistakes when he does so in an objective, helpful way. It is useless for the teacher merely to call attention to an error without helping the pupil correct it; the student knows that something is wrong but not how to correct it.

Guidance at the start aids students. In teaching map reading, for example, the teacher should be able to demonstrate how to read and make a map; he should also be able to explain the meaning of the various kinds of maps and
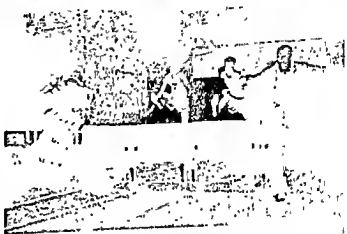
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WHOLE-PART-WHOLE SEQUENCE

In teaching motor skills, the entire skill and its component parts must be analyzed in terms of the student's level of development. Ordinarily, the pupil should practice the whole skill before he commences practice on parts of it. In swimming, for example, doing arm, leg, and breathing exercises yields poorer results than commencing with swimming underwater, floating, and surface swimming (whole movements). Even though a beginner has good arm and leg movements and can breathe in the water while holding to the side of the pool, he cannot swim until he has coördinated these various movements into the act of swimming. As in swimming, so in other areas; the adolescent first practices and gets an idea of the whole skill, concentrates on the various parts as necessary, and then integrates the parts into a unified whole (Fig. 3.6).

What should be considered a part and what a whole is under question in many areas of high-school learning. What is the whole unit in shorthand? A letter, a word, a phrase, a sentence, a paragraph? Probably, the student should start with words or phrases, practice individual symbols as much as necessary, and go on to sentences and paragraphs as soon as he has learned enough symbols. He would again practice letters, combinations, and phrases as needed.

DIAGNOSIS OF PERFORMANCE AND GUIDANCE OF PRACTICE

When students start practice in any skill, one of the teacher's main tasks is to diagnose their performance. A very important part of this diagnosis involves pointing out incorrect responses early and helping the student eliminate them. It is also im-

Fig. 3.6. Active practice of the whole skill is needed for efficient learning When should students concentrate on practicing the various parts? (Top, Atlanta, Georgia, Public Schools; lower, Des Moines, Iowa, Public Schools.)

portant for the pupils to feel that they are making progress. Because they are eager to correct their errors, boys and girls do not object to the teacher's pointing out mistakes when he does so in an objective, helpful way. It is useless for the teacher merely to call attention to an error without helping the pupil correct it; the student knows that something is wrong but not how to correct it.

Guidance at the start aids students, In teaching map reading, for example, the teacher should be able to demonstrate how to read and make a map; he should also be able to explain the various kinds of maps and
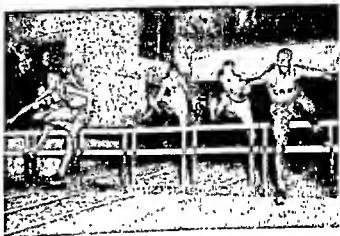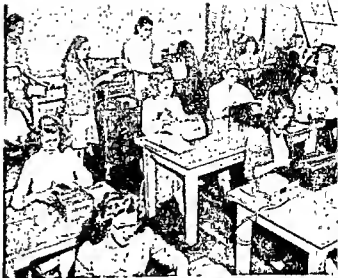
LEARNING WITH MEANING AND PURPOSE   79
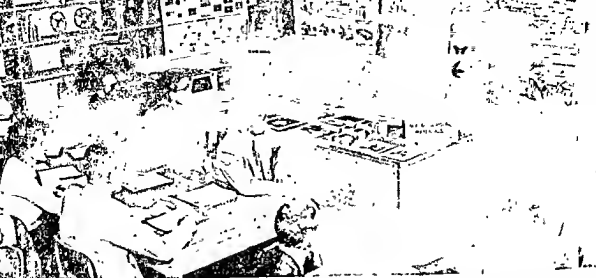
apple pie, toward capital punishment, toward communism. These attitudes affect our behavior in many specific situations. In all classroom and other learning situations, educators are concerned with the attitudes students develop toward the school itself, a particular piece of subject matter, classmates, and teachers. The teacher wants his students to

Fig. 3.8. Teachers, books, and other adolescents provide identifying figures essential to the development of attitudes and ideals. (Top, Los Angeles, California, City Board of Education; center, Milwaukee, Wisconsin, Public Schools; lower, School District of the City of Berkley, Michigan.)

BERKLEY
HIGH

develop favorable attitudes because they lead to improved learning and desirable character integration for the students, and to personal and professional satisfaction for the teacher. The teacher who is unconcerned about his students' attitudes is actually unconcerned about the effects of his work on their character development.

Values emerge from the many attitudes of an individual. When he has had sufficient experience to reinforce his various attitudes, they become generalized values which guide his behavior in new situations for long periods of time. As was said in Chapter 2, attitudes develop over a person's whole life, starting in infancy. The individuals, such as parents and teachers, with whom a youngster has close contacts are more influential in shaping his attitudes than any other agent is. In other words, the growing child identifies with persons he admires and he copies their behavior without questioning its rightness or wrongness, appropriateness or inappropriateness.

High-school boys and girls need identifying figures—teachers, the characters in books, classmates, older students (Fig. 3.8). For adolescence is a period in which marked changes in attitudes occur. The teacher who desires to be a model for adolescents to imitate must recognize that unless his students admire him they will not want to imitate him. You want your students to develop favorable attitudes toward school, education, and life in general. What steps do you take? (1) Be the kind of person students admire and conduct your relations with your pupils so that they want to imitate you. (2) Make sure that the reading materials available to your class contain suitable identifying figures. Too many novels, biographies, and plays present only very glamorous and successful persons who are so different from the rest of us that most adolescents cannot realistically identify with them or hope to imitate their success. (3) Present factual information that will help students modify unfavorable attitudes, prejudices, and stereotypes. (4) Exhibit the desired attitude in class. If, for example, you want your students to respect all the pupils, regardless of their learning ability, praise the one who makes the top scores on a test, the one at the middle, and the one at the bottom, if that is the best he is capable of. (5) Use class discussions to help the students ascertain why certain attitudes seem to be approved by most people in the United States, whereas others are disapproved. Why do we favor consistent effort, care of property, profitable use of time, good

provision for the young and the aged, monogamy, a coöperative home life? Adolescents respond favorably to discussions on topics that may arise in connection with any subject matter.

MEANINGFUL LEARNING IS RETAINED AND IT TRANSFERS

Public-school support is based on the assumption that what is learned in school will be used outside school. Two broad approaches to the problem have been tried and are in use today. The first approach calls for including in the curriculum learnings that are used by adults so that when students finish school these understandings and skills will be ready for use. The second calls for teaching the students to solve the problems which they encounter in school. By learning to meet these current problems satisfactorily, they will meet better the problems that will confront them as adults. Transfer of learning—that is, using what has been learned in one situation in a new or different situation—has been the subject of much investigation. Three major theories have been proposed; each of them will be discussed, for, consciously or inadvertently, teachers apply one or all of them in organizing classroom teaching.

FORMAL-DISCIPLINE THEORY

The formal-discipline theory of transfer is based on the assumption that mental faculties are identifiable and are independent of each other. These faculties, according to the theory, include memory, reason, attention, will, imagination, among others. They may be strengthened by practice much as muscles are strengthened; systematic drills may be instituted for exercising the mental faculties so that they become more effective. This theory was formulated when mental processes were poorly understood and it was thought that certain parts of the brain were responsible for memory, certain others for reasoning, and so on.

In accordance with the theory, memory drills—it made no difference what was memorized—were employed to develop the memory faculty. Long and difficult assignments were supposed to reinforce the faculties of will power and attention. Latin, geometry, and astronomy were thought to have inherent qualities which, when they were taught as drill subjects, enabled the simultaneous development of many faculties such as observation, reason, will, and memory.

Some teachers of geometry apparently still believe that the memorizing

of proof, step by step, is geometry's important contribution because it supposedly increases reason and memory. Similarly, foreign-language teachers seem still to believe that teaching foreign literature by analyzing sentence and paragraph structure helps the student organize his thought processes in neat, efficient, formal patterns.

All the evidence points to the fallacy of maintaining that mental discipline is the basis of transfer. No material that is not understood, regardless of kind or how well it is memorized or how much drill is spent on it, transfers to new situations. This statement does not deny that drilling a child in a particular belief and punishing or making him feel guilty for examining any other belief critically may lead to his firm acceptance of the belief. There is sufficient evidence on this point from the schools of Nazi Germany to indicate that individuals can be taught to accept certain beliefs blindly. The beliefs thus taught do, of course, guide behavior in many situations.

IDENTICAL-ELEMENTS THEORY

The second theory assumes that the elements present in the original learning must also be present in the new learning which it facilitates if transfer is to occur. These identical elements may be facts or skills. Thus, after the student has mastered the addition facts, he can use them in all sorts of problems involving addition; the same applies to percentage, fractions, and the like. Similarly, when he has mastered the skill of using an index in one kind of book, that skill transfers to using other indexes that are organized in the same way.

Generally, this theory has proved to be valid. When problems have identical elements, transfer occurs. However, situations may be very much alike and still be very different. In multiplication, for example, placing a decimal point in the multiplier makes the problem a different one. Unless the pupil understands decimals, his skills in adding, subtracting, and multiplying will not transfer so that he obtains a correct solution to the problem.

The proponents of the identical-elements theory can point with some pride to the fact that today the facts and skills needed to make a living are taught in most high schools. When a school wishes to help girls become better homemakers, it recommends classes in home economics, not foreign languages or higher mathematics. When it wants to help boys

get jobs in factories, it offers courses in welding, machine operation, woodworking, auto mechanics, and blueprinting, not advanced physics or astronomy. Students are helped to become better farmers by courses in animal husbandry, soil conservation, and various allied subjects. When they proved the formal-discipline theory inadequate as a basis for selecting learning activities and teaching methods, the proponents of the identical-elements theory rendered a great service to high-school instruction and curricula.

GENERALIZATION THEORY

The third theory is based on generalization, or the process of discovering the basic principles and relationships in conceptual kinds of learning and the principles underlying skills. The student arrives at generalizations through undergoing specific experiences, picking out common elements, identifying basic processes, and organizing them in a meaningful way. The generalizations he has thus learned are used in new situations.

Transfer by generalization is an extension of transfer by identical components. Unless the new learning has enough in common with previously learned material for the learner to recognize the application of the latter, no transfer occurs. Generalization provides a more mature and a broader viewpoint of effective instructional procedures. When instruction is freed from the monotony of isolated and specific facts in many different subjects, interesting and worth-while activities can be organized and a higher quality of learning achieved. Comprehensive projects, problem-solving activities, class discussions which develop social skills, units which stress broader principles and generalizations can be used instead of the short, unrelated, daily lessons which emphasize the learning of many specific facts, skills, and attitudes.

Our present knowledge about transfer indicates that when these specific facts, skills, and attitudes are learned well in school, they do transfer to life situations outside school that call for them. However, the general methods of work, the general attitudes toward work and life, and the few but important generalizations that underlie the many specific facts and skills are retained longer and can be used in more situations both in and outside of school (Fig. 3.9).

In short, then, if we wish students to use in new situations what they have learned in their classrooms, we might, as a starting point, completely

discard the idea of formal discipline. We should select the main principles and generalizations for emphasis, make them clear to the student, help him apply them in several different situations, and provide many opportunities to practice them in the classroom.

DIFFERENCES IN STUDENTS AFFECT LEARNING OUTCOMES

By the time boys and girls reach the seventh grade, they show wide variations in learning capacities and achievement. Some young people are far superior to others in skills involving neuromuscular coördination such as swimming, playing ball, and using machines or tools. Differences are also apparent in verbal skills; some students read well and have good vocabularies, whereas others are years

Fig. 3.9. How can instruction be handled in this situation so that desired learnings will transfer to other situations? (Chicago, Illinois, Public Schools.)

behind the norm. Among seventh-graders there is a range from fourth to tenth grade in reading; that is, one pupil has the reading achievement of an average fourth-grader, whereas another has that of a tenth-grader. In the tenth grade the range is even wider. There are also differences in arithmetic and spelling achievement and in social skills. Some seventh-grade boys lead other boys three or four years older in informal play and social activities; other boys in this grade take directions from fifth-graders. These differences are perhaps greatest in creative achievements such as music and art; here they range from nil to a high degree of skill. Undoubtedly, these variations are due to extremely unequal opportunities to develop these skills both at home and in elementary school. Thus, when we analyze learning abilities of students twelve to eighteen years old, we find wide differences among them at all grade levels.

The individual student also shows wide variation in intellectual, social, and physical aptitudes. One pupil does well in mathematics, not so well in French. Another is poor in both English and science but sings well or plays a good game of baseball.

Some of the differences in students are indicated in Table 3.1, based on information obtained during the first nine weeks in an eleventh-grade required class in English. In studying the table, note that the range in

TABLE 3.1. Differences in Students in an Eleventh-Grade English Class

Student	Henmon-Nelson Percentile Rank	Grade 9 Marks	Grade 10 Marks	Pre-Test Grammar	Same Test, Grammar, 9 Weeks	Adverb Test	Vocabulary Test	Book Report	Attitude	Initiative	Practical Application
1	97	A, B	A, B	100	100	100	100	B	Very good	Fair	Very good
2	96	B, B	B, B	96	97	100	100	A	Fair	Fair	Good
3	93	A, A	A, A	96	100	100	100	B	Very good	Fair	Very good
4	93	A, A	B, B	100	97	92	100	A	Very good	Fair	Good
5	92	B, B	C, C	72	97	96	100	B	Good	Poor	Fair
6	85	A, A	A, B	98	100	88	95	A	Good	Fair	Fair
7	83	B, C	C, C	68	91	63	43	Absent	Fair	Fair	Fair
8	77	B, C	B, B	100	91	84	43	A	Very good	Good	Very good
9	77	A, B	B, A	90	100	96	78	A	Good	Very good	Very good
10	73	A, A	B, B	100	97	85	87	A	Good	Fair	Good
11	72	C, D	B, C	80	91	62	63	C	Fair	Fair	Fair
12	82	C, C	C, C	72	94	68	43	B	Very good	Very good	Fair
13	55	B, C	B, B	68	78	75	55	B	Fair	Poor	Fair
14	55	C, D	D, B	80	79	88	48	B	Fair	Fair	Fair
15	55	D, C	D, C	Absent	Absent	Absent	45	B	Fair	Poor	Poor
16	48	A, A	B, B	100	88	100	73	A	Very good	Very good	Very good
17	45	B, C	C, B	80	78	Absent	55	B	Fair	Fair	Fair
18	42	C, D	F, C	80	82	66	43	C	Fair	Poor	Poor
19	39	B, D	C, B	Absent	37	61	43	C	Fair	Poor	Fair
20	36	B, B	C, C	96	100	96	93	A	Very good	Good	Very good
21	30	C, F	D, C	80	94	82	63	B	Poor	Poor	Poor
22	27	D, C	C, C	88	94	80	45	B	Fair	Fair	Good

intelligence is from the 27th percentile rank to the 97th on the Henmon-Nelson test. A percentile rank of 97 means that that student's score is higher than 97 percent of all high-school juniors in that state. Many English classes have percentile ranks considerably lower than this class does. In an "average" class we expect the middle score in the group to be at the 50th percentile rank; half the pupils in this eleventh grade had percentile ranks between 73 and 97.

Previous grades in English range from F to A. Test scores range from 37 to 100. Class participation, ranked on the four-point scale of very good, good, fair, and poor, ranges from poor to very good in attitude, initiative, and practical application.

Differences in the individual student are especially apparent in Nos. 2, 5, 6, 7, 14, 15, 16, 20, and 22. Student No. 2, for example, has a very high percentile rank in intelligence; but six students with lower percentile ranks received higher marks in Grades 9 and 10, and many made a better showing in attitude, initiative, and practical application.

If we could present the grades made by these students in all subjects they took previously and during the current year, even wider differences would appear. The information presented is sufficient to suggest that the teacher ascertain the abilities of each student and provide appropriate instructional activities for all. The incidence of failures and poor ratings is even higher in classes whose teachers require identical assignments of every pupil and grade only on the basis of comparative achievements. In such classes learning is less valuable and less efficient for many students.

SUMMARY

The teacher's role as a director of learning receives the greatest emphasis by students, parents, school administrators, and the general public. *How well students learn is the principal measure of his success.* The teacher should try to understand the nature and conditions of learning.

The following teaching *principles* lead to efficient learning by students: Organize learning activities in which all the students experience purpose and meaning. Provide *continuing, high motivation.* Arrange for students to have direct experience with the main concepts they are to learn. Manage practice efficiently. *Encourage* problem-solving activities in which the students clearly perceive relationships, including solutions. Be the kind of person with whom students *want to identify* so that they will imitate your attitudes, values, and other behavior. Select for emphasis the more important *principles and generalizations* that are to be learned, teach them meaningfully, and help students apply them in many situations, including your classroom. Provide for differences in abilities among students.

No teacher can follow all these principles to the letter; however, high-school instruction will be vastly improved if a serious attempt to do so is

made. Part II of this book presents detailed discussions for implementing these principles.

Questions and Activities

1. Apply the developmental sequence in purposeful learning to some skill you have acquired.
2. List your activities during the past twenty-four hours and discuss the motives for them.
3. How may rewards and punishments serve as incentives to learning? Why are rewards more suitable than punishments? What are the major objections to the widespread use of rewards?
4. How do success and failure differ from rewards and punishments? How are goal setting and knowledge of progress related to feelings of success and failure?
5. Write a definition of home. Identify the direct experiences which have been most important in formulating your present concept of home.
6. Name a skill that you wish students to acquire. List the principles regarding practice that you would follow in teaching it, and describe briefly how you would put each principle into practice.
7. What is insight? How does learning with insight differ from learning by repetition?
8. What is the basis for recommending that the teacher identify and teach well the more important generalizations and principles rather than the more specific facts?
9. Why are generalizations remembered better than facts?
10. Discuss the differences you would expect to find among 100 seventh-, ninth-, or eleventh-graders in IQ, reading achievement, interests, social skills, and such creative expression as music, art, or dancing.

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W_E KNOW that individuals learn attitudes and values; they may learn to work together harmoniously or to quarrel and fight. Some homes are characterized by friendly relationships, some by argument and strife. In some classrooms the morale is high and the work output good; in others the morale is low and the work output poor. In some communities prejudice and discrimination are rampant; in others harmonious relations exist among friends and neighbors. How are high-school teachers concerned with these factors?

The goals of secondary education and of democratic living include the development of understandings, skills, and values which enable individuals to associate harmoniously in group life. If the school is to contribute to these goals, its practices should exemplify four principles:

1. The ideals of democratic living guide classroom interactions.
2. The school exemplifies the ideals.
3. Instruction is related to democratic ideals.
4. Students with special needs are provided for.

THE IDEALS OF DEMOCRATIC LIVING GUIDE CLASSROOM INTERACTIONS

Democratic living will be strengthened when the following ideals operate in the conduct of all citizens, young and old: (1) Everyone respects the unique individuality of every other person. (2) Everyone uses intelligence rather than force in solving problems. (3) Everyone coöperates for the welfare of the group. (4) Everyone accepts responsibility for his activities. (5) Everyone accepts the hypothesis that people, individually and collectively, can improve the quality of living.

THE UNIQUE INDIVIDUALITY OF OTHERS

When adults respect the unique individuality of children at home or in school, each child feels that he belongs in the group, that he is wanted and worth while; he participates in the activities of the group; he feels that he has a definite place in the group, that he has status; and he feels secure in the group. These reactions are interdependent; no one is more important than any other. However, the order in which they are pre-

sented follows a developmental sequence which might be adopted by a teacher who is meeting a new class.

The Feeling of Belonging

Adolescents, more than any other age group, want to belong to a crowd, to be known to their agemates, and to be accepted and sought by others (Fig. 4.1). They want friends and chums. They dress and talk

Fig. 4.1. A feeling of belonging is important to adolescents How can it be encouraged in classroom groups? (Wilmington, Delaware, Public Schools.)

in accordance with group standards. But in many high schools there are some students who do not feel as if they belong. Their clothing is inadequate; they do not speak English well or read and write fluently; they cannot compete with others because of inadequate educational background; they do not know anyone in the class; they come from "across the tracks." There are many reasons why adolescents do not feel at ease with their agemates or with teachers and other adults.

If a teacher is to help students develop a feeling of belonging, he must carefully examine his own attitudes toward persons of different races, religions, nationalities, socioeconomic status, mental abilities, and idiosyncrasies. A teacher, even though prejudiced, will probably not discriminate against children when he himself realizes and understands his prejudice. But when he fails to recognize it as prejudice, discrimination is sure to follow, because he is unaware of any discrimination. Discriminatory comments like "the dumbbell group," "mental cripples," "future delinquents," "no-good [member of a minority group]," "chronic liar and cheater," "poor trash," and the like are indicative of prejudiced reactions. Such name calling destroys good intergroup relations and violates respect for individuality.

Children have no choice in the matter of skin color, location of their home, their parents' attitudes and beliefs, mental characteristics, physical defects, special aptitudes or lack of them. Respecting the unique individuality of each student means accepting him as he is and helping him to become part of the classroom group so that he can contribute accord-

ing to his abilities and background. The teacher must accept him not only for what he is but also for the good citizen he may become. A teacher who fails to do this provides little chance of helping a student better himself and the group of which he is a part. If the teacher cannot accept a student, how can his students be taught to respect one another? Furthermore, if they do not have this respect, they will not coöperate in group activities.

Participation in Group Activities

When a person feels he belongs to a group, he takes part in its activities; conversely, when he feels he is not wanted, he remains aloof and isolated and thus loses the opportunity to learn from the group. Three developmental needs of adolescents—making satisfactory heterosexual adjustments, achieving emotional maturity, and gaining independence from adult control—require interaction with agemates. To become socialized, the individual must learn socially approved behavior. He can do this more effectively through group activities than through individualized activity. Social skills, which can be developed only through associating and interacting with others, are necessary in all phases of democratic living.

The teacher's attitude is a primary factor in determining whether class time is spent in group activities. Many high-school teachers, when they were in Grades 1–12, were never in a class where group projects were planned and completed by the students themselves. At the present time, nursery schools and kindergartens center most of their attention on socializing children, but children of this age are least ready to join any but very small groups. The elementary school gives much attention to continuing group activities such as play periods, recess, care of pets, and making clay models of grounds and buildings. The junior high school places heavy emphasis on subject specialization. Teachers who are expert in various areas of knowledge teach these subjects, the students going from one room to another, one teacher to another, to get ready to pass the exams for senior high school. There they drill on college entrance requirements; thus school becomes a preparation for further schooling. Teachers who have had such schooling and have profited as individuals find it difficult to organize group activities in which students can learn to participate effectively with others.

Participation with others at home and in school—in all social groups—

is a requisite for democratic living. One learns to govern himself and others by participating in many activities in which goals are formulated by the group, projects are planned by the group, and rules are made by the group. These procedures operate in the smallest informal group up to international relations, and through them individuals develop feelings of status.

Status in the Group

To discover how one rates among his peers is evidence of normal curiosity, to know that one rates well is satisfying, to know that one is rejected is frustrating, and to remain indifferent when rejected indicates serious personality conflict and maladjustment. Status means knowing one's own position and feeling that others respect it.

Children first experience status feelings in their homes and neighborhoods. They learn ways of behaving, attitudes, and values common to others like themselves. It is through such learning that status feelings develop. If a child achieves status by bullying his younger companions in the neighborhood, he will try it at school. If he is considered worthless

Fig. 4.2. Participation and feelings of mutual respect in the informal groups in school prepare for membership in adult groups. (Los Angeles, California, City Board of Education.)

in his home or neighborhood, he will feel inferior at school. If his parents, brothers, and sisters feel superior to their neighbors, he will probably feel the same way. Such feelings will be reinforced unless the school helps him to change his attitudes toward himself and others.

The abilities of all children must be developed by our schools; furthermore, many abilities have status value in the larger community as well as in the school. Each student acquires a feeling of worth-whileness when school activities are organized that enable him to pursue a special interest

or ability which has prestige value for youngsters at that age level (Fig. 4.2). Telling a class that everyone is equal and worth while is ineffective; but organizing classroom experiences that allow each pupil to contribute something to the class and that clarify the many different ways of making such contributions creates status feelings for everyone in the class. One sure means of making many students lose status is to reward only one kind of performance, such as reciting in class, doing well on tests, or reading rapidly. James, for example, may not be able to grasp the technical vocabulary used in science, he may not recite well, his test scores may be the lowest in the class, and he may read very slowly. But he may collect and take good care of specimens for laboratory work, thus gaining the approval and respect of his classmates.

Security

Feeling relatively secure in one's home, neighborhood, and school is requisite for the development of a stable personality. To feel secure, each student must know that he belongs, that he has a share in conducting activities, and that his status is respected by his teacher and other students. Little meaningful learning is possible for students who are insecure. The child who is unwanted, whose parents quarrel constantly, who feels that his parents treat his siblings better or love them more, who has never been given consistent affection by adults usually shows his insecurity by his everyday relations with others. The adolescent who has few or no friends in class, who constantly fears failure or criticism from his teacher, who is not certain whether he is accepted also exhibits insecurity. Regardless of whether feelings of insecurity originate at home or in school, the resultant classroom behavior usually takes one of two forms: withdrawing from active participation in class activities or overcompensating by talking loud, acting boisterously, or using other attention-getting devices.

A classroom characterized by security is one in which students have poise and self-confidence (Fig. 4.3). They show faith in their classmates, and in their teacher who in turn has faith in them. They respect the teacher because he treats them as individuals worthy of respect. They are friendly and considerate of one another; they show genuine concern about their classmates' problems and activities. This classroom situation is impossible if students feel that their security is threatened by pro-

Fig. 4.3. Feelings of security lead to consistent effort, efficient learning, poise, and self-confidence. (Pittsburgh, Pennsylvania, Public Schools.)

cedures such as the following: when the teacher imposes punishment arbitrarily or capriciously; allows the students to criticize or ostracize another student because of something over which he has no control—poor verbal ability, shabby clothing, a speech defect; or organizes the learning situation so that only a few students are able to feel success in their class work.

USE OF INTELLIGENCE RATHER THAN FORCE

Intelligence is the unique aspect of human behavior that enables man to analyze the past and present and to project action and its consequences into the future. Intelligence enables man to adapt to a changing environment, to change the environment, and to change himself. Most people have sufficient intellectual ability to solve their problems and to govern themselves. The potential for this behavior is present in the fertilized ovum; its development requires many learnings. How much maturation

and learning are necessary for a child to learn how to take care of his own and others' property, to play football according to the rules, to behave in a socially approved manner at the junior prom?

The use of force appears early in human behavior. Parents set requirements for the child which are easily enforced because of their physical superiority. The five-year-old forcibly takes a doll away from her younger sister. The strong children in the neighborhood set the rules of the game and the weaker ones must follow them. This pattern of force becomes deeply ingrained in habitual behavior unless boys and girls learn to use intelligence in solving problems. The learning may come incidentally with maturity, but it can be hastened by exemplary conduct by adults and intelligently guided activities for youth.

How much responsibility should be given high-school students for exercising intelligence in solving their problems? Conversely, how much force should a teacher use in making his students conform to the rules and methods he has set for working problems? In a country run by a dictator, a few individuals tell all the others what to do, how to do it, and when to do it. In a democracy, the people decide these things. Although many decisions are made by the leaders in a democracy, the people have an opportunity to pass on them at election time, and sometimes sooner. The teacher, too, is a leader; because of maturity, experience, and position, he must and should make decisions. These decisions, though, must be flexible in that they take into account the students' increasing use of intelligence and the teacher's decreasing use of force. When a leader is effective, there is less need for him as the followers develop ability to direct their activities intelligently.

Some high-school students may have had no classroom or home experiences in which to develop self-control; they will need much direction from their teacher. But they also need opportunity to develop self-control if they are to be self-directive outside the classroom and are to become intelligent self-governing adults. The teacher's leadership must be integrated with the pupils' interests and needs.

Anderson measured three types of teacher-dominating and of teacher-integrative behavior in two classrooms. After computing a mental health quotient for the two classrooms, he found that domination by the teacher was accompanied by evidence of conflict between teacher and pupils and tended to produce a low mental health quotient, whereas integration

was accompanied by evidence of teacher and pupils working together and produced a relatively high quotient. Short examples of both types of action are presented to provide a framework for examining teacher behavior with respect to the democratic ideal under discussion.

Domination with evidence of conflict:

1. Teacher arbitrarily prescribes some activity: "Don't do it that way. I'll tell you what to do."

2. Teacher answers "No" when pupil asks if he can do something.

3. Teacher tells a child to go to another part of the room.

4. Teacher postpones something without giving any reason or setting a future date: "We can't do that now."

5. Teacher uses disapproval, blame, shame, obstruction, or interruption to secure different behavior from a pupil.

6. Teacher uses warning, threats, conditional promises: "If you can't do what you're supposed to do, you'll have to go out in the hall."

7. Teacher calls to attention: "Jimmy, face this way, won't you?"

8. Teacher deprives children of specific materials, activities, rights, or privileges, including corporal punishment, sending a pupil out of the room, keeping him after school, and sending him to the principal's office.

Integration with evidence of working together:

1. Teacher helps student to define, redefine, or progress with the problem. The problem must have been stated and accepted by the pupil.

2. Teacher agrees with, approves of, or accepts the student's contribution. This is a response to spontaneous or self-initiated behavior; approval of the pupil's selection is given when several answers or new answers are possible.

3. Teacher extends invitation to go ahead in response to the pupil's wish, suggestion, or expression of need.

4. Teacher asks questions regarding the student's expressed interest or activity.

5. Teacher comments on such interest or activity.

6. Teacher accepts the responsibility for action by a child that is inconvenient, unjust, or unfair to another child; he also admits his own ignorance or incapacity.[1]

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[1] Harold H. Anderson, "Domination and Socially Integrative Behavior," in Roger G. Barker (ed.), *Child Behavior and Development*, New York: McGraw-Hill Book Company, Inc., 1943, pp. 463-469.

This study indicates that it is usually unwise for the teacher to resort to force. The better way is to organize classroom activities which call for a minimum of commands from him and a maximum of intelligence from both the students and himself.

COÖPERATION

In a two-party system the idea of coöperating on a local, state, and national level is generally accepted politically. At the social level, people organize labor unions, professional organizations, businessmen's clubs, service groups, and the like. Our college fraternities and sororities are in existence because students want to band together and find that coöperating with one another is advantageous for the whole group. All such organizations indicate the people's willingness to contribute time, money, and loyalty for the welfare of themselves and others.

The efficiency of all adult groups probably would be improved if young people were given opportunity, under adult leadership, to develop competence in identifying group goals, planning activities to achieve these goals, learning communication skills, defining and assuming responsibility for work activities, and evaluating the final outcomes of the group's work and each individual's contribution (Fig. 4.4). The opportunity to develop these skills varies widely in school, home, industry, and government in accordance with how the work situation is organized and managed.

Lippitt and White studied the behavior characteristics of ten-year-old boys in club activities under three types of leadership: authoritarian, democratic, and laissez-faire. The researchers carefully controlled the type of activity, the physical setting in which the clubs met, the special characteristics of the boys in each club, personality differences of the adult leaders, and the sequence of the three types of leadership. Through this control and by careful observation of the boys, the effects of the three types of leadership were ascertained.

The experiment was designed so that the characteristics of authoritarian leadership were: "(1) All determination of policy by the leader. (2) Techniques and activity steps dictated by the leader, one at a time, so that future steps were always uncertain to a large degree. (3) The leader usually dictated the particular task and work companion of each member. (4) The dominator tended to be 'personal' in his praise and
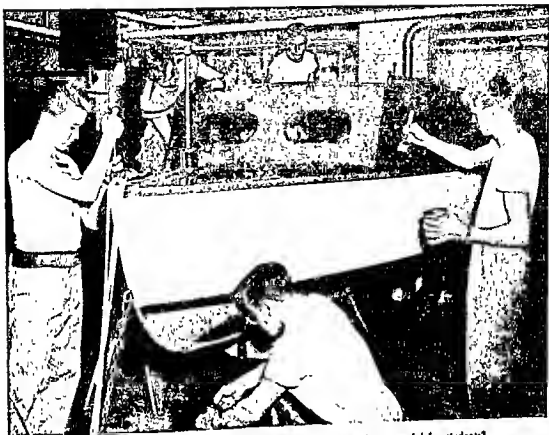
Fig. 4.4. What conditions must be present if coöperative activities are to be successful for students? (Wilmington, Delaware, Public Schools.)

criticism of the work of each member; remained aloof from active group participation except when demonstrating."

The characteristics of democratic leadership follow: "(1) All policies a matter of group discussion and decision, encouraged and assisted by the leader. (2) Activity perspective gained during discussion period. General steps to group goal sketched, and, where technical advice was needed, the leader suggested two or more alternative procedures from which choice could be made. (3) The members were free to work with whomever they chose, and the division of tasks was left up to the group. (4) The leader was 'objective' or 'fact-minded' in his praise and criticism and tried to be a regular group member in spirit without doing too much of the work."

Laissez-faire leadership was executed as follows: "(1) Complete freedom for group or individual decision, with a minimum of leader participa-

tion. (2) Various materials were supplied by the leader, who made it clear that he would supply information when asked. He took no other part in work discussion. (3) Complete nonparticipation of the leader. (4) Infrequent spontaneous comments on member activities unless questioned and no attempt to appraise or regulate the course of events." [2]

The following summarizes some of the more important findings of this study. (1) The amount of time spent in group discussion was seventy-eight times greater under democratic than under authoritarian leadership. (2) Expressions of discontent were about ten times more frequent under authoritarian than under democratic leaders. (3) The authoritarian leader's remarks were purposefully ignored four times as often as the democratic leader's. (4) Group-motivated remarks to members were three times more frequent under democratic than authoritarian leadership. (5) Loafing tripled under authoritarian compared with democratic leadership. (6) The work output was somewhat greater under authoritarian than democratic leaders when the leader was with the boys; it was two to three times greater under democratic leadership when the leader was absent; it fell off very rapidly when the authoritarian leader was not present, but hardly at all if the democratic leader was not with the boys. (7) Under democratic leadership the group was stimulated to self-direction six times more frequently than under the authoritarian. (8) Aggressiveness to members of the group was slightly greater under authoritarian than under democratic leadership. Laissez-faire leadership ranked somewhere between the authoritarian and the democratic in expressions of discontent, aggressiveness to members, and stimulation of group self-direction; it was highest in the incidence of group-motivated remarks to members, purposeful ignoring of the leader's remarks, and loafing. Furthermore, under the democratic leader, group morale was highest, there were fewer disrupting incidents, the boys were happiest, they learned how to handle many of their problems in group discussion, and they wanted to continue their club activities. [3]

RESPONSIBILITY FOR FREEDOM OF ACTIVITY

Freedom of activity has different meanings for people—doing whatever one chooses as long as it does not interfere with the rights and activities

[2] Ronald Lippitt and Ralph K. White, "The 'Social' Climate of Children's Groups," in Roger G. Barker (ed.), *op. cit.*, p. 487.
[3] *Ibid.*, pp. 485–508.

of others; living and letting live; letting each person do whatever he chooses, whenever and wherever he chooses, as long as he follows accepted codes of decency; selecting one's own vocation, religion, and mate; remaining unfettered by the mores and traditions of society. Each of these has an identical element, in that individual freedom of action always involves the freedom of others. From the moment of birth the individual is dependent on others for the satisfaction of his needs. As he matures, he becomes less dependent and earns his livelihood directly. However, the

Fig. 4.5. How can young people like these be assisted in cherishing and guarding their freedom of activity? (Dallas, Texas, Independent School District)

increasing complexity of our society resulting from industrialization has meant that relatively fewer people can secure *all* the essentials of daily living; others must provide some of the necessary goods and services. An individual is free to act to the extent that others also are free. Freedom of speech, of decision, of religion, of political affiliation is possible only when other people have such freedom. Psychologically, the individual is free only to the extent that the social groups in which he functions permit him freedom from fear, from guilt, and from rejection.

What does freedom of action mean in a democracy? It means that the individual acts in accordance with his own intelligence in making choices

and at the same time assumes responsibility for his action in the social groups to which he belongs (Fig. 4.5). Thus, two distinct factors are involved: (1) relying on one's intelligence in making a choice and (2) assuming responsibility for his action in terms of himself and others. Both are highly dependent on the leader of the social group, the classroom teacher, and the parents. The ideal calls for each individual to develop intelligence and social consciousness so that his actions secure a greater measure of freedom for himself and others. Much learning is necessary for this kind of behavior; furthermore, adults largely control both the examples of this learning and the environment in which young people acquire it.

There are at least four ways to increase freedom of activity for youth: (1) Provide situations wherein students become aware of alternatives; (2) provide more alternatives; (3) encourage students to examine probable consequences of action; and (4) enable students to increase their ability to assume responsibility for their actions.

If a choice is to be made, at least two possible alternatives must be present. When there is no opportunity to choose—that is, when there is only one course of action—the student obviously cannot improve his ability to make rational decisions. Thus, a young lad decides that he wants to prepare for a teaching career in elementary education. He is in the last year of high school and his record will admit him to various colleges and universities. He knows a great deal about the state university but nothing about other colleges, so he decides to go to the state university. Had he investigated several other institutions from the standpoint of cost, reputation in educating elementary-school teachers, campus organizations, and the like, he could have assured himself that he was making an intelligent choice. As it is, he does not increase his ability to make choices because he knows about only one university.

The ability to make decisions is closely related to the number of alternatives provided by the teacher in ordinary classroom situations. The desire to seek alternatives rather than being satisfied with one solution is gained by means of many concrete experiences. When the teacher suggests only one way of learning about working in state or federal agencies —namely, reading a section in a textbook—the student has no choice and does not develop an inquiring attitude. If the teacher suggests that the

class find out about government jobs, they will undoubtedly suggest the following possibilities:

1. Talk to people in the community who are employed by state and federal agencies.

2. Get facts and information about civil service from the post office.

3. Go to the library for information.

4. Bring someone to class who will explain city, state, and national regulations concerning employment.

5. Read what the textbook has to say on the subject.

Thus, five alternatives are available to choose from. When many situations such as this are provided in secondary classrooms, the school is giving the student opportunity to choose from several alternatives that are acceptable to the teacher and that involve rational thinking by the students. This learning is necessary if freedom of action is to be developed.

Before taking action, its possible consequences must be examined. Suppose a family bound for vacation at a particular resort area must drive through a mountainous region. There are three possible routes. One is a well-marked major highway that the family has driven over several times; the second is well-marked but more circuitous and the family has never driven over it; the third is poorly marked and cars are infrequent, but apparently it goes through unusually scenic areas. What probable consequences does each route entail? The first means a fast trip and hence more time to spend at the resort; the second will take longer but will offer new sights and experiences; the third will take still longer and offer such possible experiences as getting lost, running out of gas with no filling stations near, spending nights in the car, and perhaps not reaching the destination. The two latter alternatives might be enjoyed if the possible consequences were analyzed in advance.

Students need opportunities to analyze the possible consequences of action and to take responsibility for it. The latter, in terms of freedom of action, means evaluating the consequences of actions on oneself and others. For example, the junior class is about to decide whether the girls will wear formal gowns or street dresses to the prom. Some of the girls in the class would like to go to the dance but cannot if formal gowns are required. If, despite this knowledge, the majority votes for formal gowns, each one who voted must accept responsibility for preventing one of her

classmates from attending. A majority vote, however useful it may be in deciding political issues, needs close analysis because the rights of others are generally involved.

In all areas of secondary education, particularly those related to affairs over which individual students have no control, such as financial, racial, and nationality affairs, the teachers must give special attention to allowing students to make choices and evaluate the consequences of their action. Lacking this choice, they are under no obligation to assume responsibility for the consequences because they did not make the decision.

FAITH IN PROGRESS

Scientific and technological inventions have produced new wonders during the past few decades. The appliances and tools in daily use have improved at an ever-increasing rate, and their use has vastly increased. Thus, in 1900 a small minority of families in this country had telephones; today, the majority do. The radio was practically unknown in 1900; but today high-school students hear radio programs that originate all over the world. Radio and television enable them to hear and see what is going on in the world today, and world events have become of vital concern to them.

In 1900 about 10,000 automobiles and trucks were traveling over rocky, muddy roads; today, many millions of cars and trucks clog our cities and spread death and destruction as they roll along on our superhighways at speeds of over a mile per minute. The airplane was being discussed as a possible means of transportation in 1900; today it is forcing many railroads to discontinue passenger service. More young people learn to fly planes today than learned to drive a car in 1920. It is entirely possible that some of us will see passenger-carrying spaceships become fairly commonplace.

What about the energy required for these greatly increased rates of production, communication, and transportation? Energy sources have also changed—from wood to coal, to petroleum products, to electricity, and now to atomic power. As these different forms of energy have come into use, machines have been built that would control and utilize them efficiently. Vast quantities of finished goods are now produced by huge machines that are controlled by a person's fingertips. Just as petroleum and electrical energy have made goods and services available to our

people, so atomic energy may provide the means for reducing economic misery throughout the world.

The course of technological advances during the first half of the present century brings to light many factors which encourage continuing faith in man's ability to master his environment. But how have human relations fared—from the most basic institution, the home, to international relations? In 1890 there was one divorce for every sixteen marriages; in 1950 the ratio was about one to four. In 1917 we entered the First World War to save the world for democracy. We won that war but then had to save the world from fascism during 1941 to 1945, and are now devoting our efforts to fighting communism. During the early 1930's we suffered the worst mass deprivation of the necessities of life ever experienced in our history, and this at a time when food was plentiful. Progress in human relations has not kept pace with technological advances.

Man's scientific and technological inventions have created the means of freeing him (Fig. 4.6). They may also be the means of destroying not only his freedom but his very existence. Significantly, production rates and new inventions, including the harnessing of the atom, reach their peak heights when stimulated by war. The greatest minds of several nations were utilized in producing the atom and hydrogen bombs.

If intelligence can make such technological progress possible, it should also be able to improve human associations and control them for the common welfare. From the home, where only a few individuals are concerned, up to international relations, in which all the nations of the world are involved, human associations are in dire need of improvement. Faith in progress in human affairs will be strengthened by providing concrete experiences in democratic living—experiences in which the ideals discussed earlier in this chapter are brought into action.

THE SCHOOL EXEMPLIFIES THE IDEALS

The daily face-to-face relations which teachers have with adolescents profoundly affect the latter's attitudes and values. Young people learn democratic values and behavior in formal and informal activities under the guidance and supervision of their teachers. The teacher-youth relationships that are crucial to the survival and progress of democracy are closely related to the instructional and class-management procedures the teacher employs.
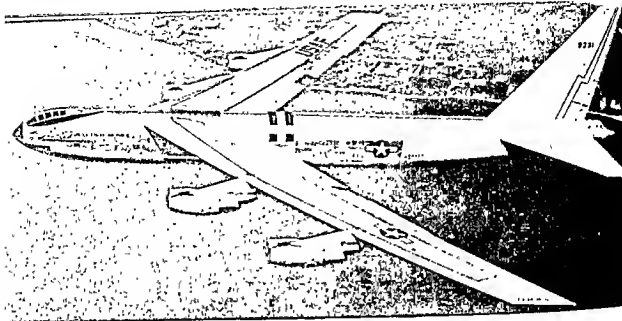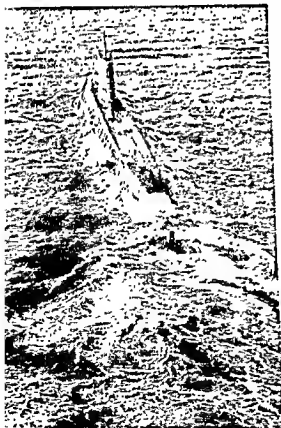
Fig. 4.6. There is abundant faith in man's ability to master his physical environment. Why is faith in improving human relations so lacking? (Top, Official U.S. Air Force Photo; lower, Ralph Morse Life Magazine © 1955, Time, Inc.)

Baxter analyzed classroom teaching situations in the elementary grades in relation to achieving the ideals of democratic living. The behavior of effective and noneffective teachers is so vividly and clearly described, and so applicable to secondary-school teachers that we quote most of them.[4] The left-hand column lists characteristics of the effective teacher; the right-hand column, those of the noneffective teacher.

These fifteen characteristics might well apply to many high-school teachers you have encountered. We recognize, however, that a gym teacher's behavior in a class of one hundred might be very different from that of the teacher of advanced literature with twelve in his class. Also, a teacher's

[4] Bernice Baxter, *Teacher-Pupil Relationships*, 1941, pp. 33-35. By permission of The Macmillan Company.

EFFECTIVE TEACHERS	NONEFFECTIVE TEACHERS
Having the ability to remain self-controlled in midst of conflicting demands.	Displaying an inadequacy to classroom demands, easily disturbed.
Poised and efficient in directing several simultaneous activities.	Confused and bothered by interruptions and unforeseen demands.
Habitually quiet, poised, and courteous in relations with children.	Demanding, imposing, impatient in relations with children.
Constructive and encouraging in comments and manner.	Resorting to threats and punishments, sarcastic, cross.
Conversational and friendly in relations with pupils. . . .	Tense, stern, and unfriendly with children. . . .
Eliciting willing response from children. . . .	Eliciting apathetic, even antagonistic, responses from children. . . .
Participating with interest in pupils' activities.	Always the director of children's activities—never a participant.
Interested in helping pupils to direct their own conduct rather than securing conformity through personal domination.	Asking children to conform to the teacher's way.
Possessing sufficient self-restraint to allow children to work through their own problems. . . .	Imposing directions and requirements upon children, oblivious of pupil initiative and resourcefulness. . . .
Evidencing a planned but flexible procedure with materials and individual needs anticipated.	Absorbed in controlling the immediate situation—no plan in evidence.
Careful in planning with pupils and in guiding them to successful completion of undertakings.	Expecting children to know what to do and seemingly satisfied if they keep busy.
Skillful in directing pupils to evaluate their own work.	Failing to help pupils set up standards of their own.
Aware of children's physical and emotional needs as well as their educational needs.	Unaware of all else except accomplishment of academic work.
Interested in pupils as persons.	Interested only in each child's academic progress.
Alert to the differences in individuals, recognizing abilities and limitations.	Little or no understanding or provision for individual variation or difference.

behavior varies markedly with the nature of the students. Students in one class may be industrious and well behaved and exercise considerable self-control; students in another class may show the opposite qualities. More positive control is needed with the latter students.

Since the classroom is a group and the group is significant in the lives of adolescents, handling group relations and activities well in the classroom facilitates achievement of the democratic ideals, including extension of individual freedoms (Fig. 4.7). Trow and his colleagues summarized recent research in group dynamics that had implications for the school. They arrived at the following twelve main conclusions:

1. . . . Present evidence makes it apparent that many attitudes can be changed more easily by making changes in certain properties of the group than by directly teaching the individuals, as individuals, even in a classroom audience situation.

2. The conduct and beliefs of pupils are regulated in large measure by the small groups within a classroom, such as friendship cliques, and the cohesive groups of students within a school. . . .

3. In some instances failure to learn may be advantageously conceptualized as resistance to change. . . . For example, the group standards developed by persons who were learning a motor task quite similar to a previously perfected one, and who were simply told what they were to do, were entirely different from the group standards developed in a group in which the learners participated in a discussion and made group decisions about the necessity for, and the nature of, the new task to be learned. Those who participated in the discussion learned much more, more rapidly, and with less aggression and resentment toward the persons inducing them to make this change.

4. When frustrations are met, highly cohesive groups maintain their effort in movement toward the group goal much more vigorously and effectively than do groups of low cohesiveness.

5. Groups, especially those similar to classroom groups, can be disrupted into separate cliques; or this threat of disruption can be eliminated, by the alteration of forces which determine the attractiveness of the group for the members. . . . This condition can be brought about more easily when the members become aware of the forces influencing them, but it can also be effected by an outsider, such as the teacher, who adroitly helps the group to change the impact and strength of these forces surrounding and within their group. . . .

7. The amount of interaction among students in a class is determined in part by group factors. For example, in highly cohesive groups arriving at a decision that has general approval, the person whose viewpoint is too different from that of the rest will be rejected—that is, ignored. . . .

8. When the members see themselves competing for their own individual

Fig. 4.7. What does research in group dynamics suggest about group attitudes and interaction in situations like these? (Top, School District of Philadelphia; lower, New York City Board of Education.)

goals which make coöperative effort impossible, there is disruption of the ready communication of ideas, the coördination of efforts and the friendliness and pride in one's group which are basic to class harmony and effectiveness. The competitive grading system commonly used today is an illustration in that it creates mutually exclusive goals among the members of a class group.

9. The group climate or style of group life can have an important influence on the member's personalities. One such style of group life can develop hostile, obedient, uncreative "goldbrickers"; another can produce confused, purposeless, competitive drifters; and still another can mould coöperative, flexible, purposeful, turn-taking, we-spirited persons. . . .

10. The reasons for the occasional failure of project methods, and other teaching procedures which depend upon effectively functioning groups often lie in the ineffective use of group problem-solving methods, or in the unskillful handling of group procedures. . . .

11. Certain forms of classroom behavior may be recognized as mechanisms developed for relieving tensions somewhat similar to those employed by an individual in relieving tensions. For example, they [the group members] employ patterns of group behavior which help avoid difficult tasks or unpleasant situations. . . .

12. Difficulties in the transfer of verbal learning to social behavior can often be overcome by the use of that form of role-playing referred to as reality practice, in which the participants try-out the behavior they are expected to use in a situation from which all threat has been removed.[5]

INSTRUCTIONAL FIELDS ARE RELATED TO DEMOCRATIC IDEALS

Major emphasis in the discussion thus far has been directed on clarifying the role of the teacher in the formulation of democratic ideals and in teacher-pupil relations because democracy is a way of life, and the methods used by the teacher are more important than any organized facts and information in helping students learn how to live in a democracy. However, certain topics in this area are frequently not given sufficient attention in the secondary program; these include forms of government, intercultural education, problems in community life, and the role of education in democracy.

FORMS OF GOVERNMENT

Studying various forms of government such as communism, dictatorship, and democracy helps pupils understand the ideals underlying each one, the way by which a government functions, the methods employed

[5] William Clark Trow, et al., "Psychology of Group Behavior: The Class as a Group," *Journal of Educational Psychology,* October, 1950, pp. 326–329.

by its leaders, the duties and responsibilities of its citizens, and the way of life under each type. There has recently been considerable opposition to high-school instruction about communism, but in some communities discussions held by school officials, teachers, parents, and other adults have indicated that it should be offered. It is entirely plausible that adolescents will value democracy more highly when they learn that under certain other forms of government the individual is not respected, minority groups are liquidated, individual liberties are destroyed by the police, and there is little or no self-determination of life goals.

INTERCULTURAL EDUCATION

Intercultural education is concerned with helping students understand the differences and similarities of the people in our own society and in the world (Fig. 4.8). It is concerned with aiding youth to discover the needs and aspirations that are common to all people, the differences that may be capitalized upon to improve the quality of life, and the differences that are undesirable and hence should be controlled or eliminated.

Fig. 4.8. How and when should students have instruction in intercultural relations? (Pittsburgh, Pennsylvania, Public Schools.)

The United States still has not found an adequate solution to the problem of minority groups. We do not know how to deal with minority groups that exercise their constitutional rights—freedom of press, of speech, and of assembly—but refuse to accept responsibility for their actions. At times majority groups discriminate against minority groups—racial, nationality, religious, and political—not because they have violated rules and regulations or differ markedly in their needs and aspirations, but solely because they are in the minority. Understanding the similarities and differences in the individuals and groups that make up the com-

munity, the state, and the nation, and applying the democratic ideals to solving group problems will help students and teachers alike learn to get along with one another more effectively.

We are all aware that people are becoming increasingly interdependent. We need to know much more about the cultural patterns of all peoples—Oriental, South American, etc.—if lasting peace is to be achieved. The study of geography and history helps in acquiring such understandings. What is proposed here is that particular attention be given to the specific study of the cultural patterns of various peoples wherever appropriate in the junior and senior high school.

PROBLEMS IN COMMUNITY LIFE

Democracy is a way of life, not a goal to be reached in the distant future. Our concepts concerning democratic living undergo modification and refinement in line with the continually changing political, social, and economic conditions. The net result is that the school community, the locality, the state, our nation, and the nations of the world are constantly faced with new problems for which no solutions to earlier problems are completely satisfactory. As far as the school program is concerned, the most effective learning begins with the problems that can be solved at a verbal level and can then be put into practice at an action level.

Recurrent problems in the school community relate to the organization and functioning of the student council or student government; the election of class officers; the formulation of guides for behavior in the school buildings and at such events as parties, dances, and athletic contests; and the care of property. Democratic behavior should be exercised at the action level in connection with these problems rather than be taught as ideals and abstractions. Is it not somewhat unrealistic, for example, to teach respect for others' property as an ideal and at the same time to decree that a student who has not fastened his locker properly is responsible for any theft that occurs? If we cannot educate students sufficiently so that they will not steal from their classmates' lockers, how can we expect them to respect the property rights of people who are completely unknown to them?

Many problems that confront most localities, small and large, might serve as important learning areas throughout secondary school. How effective are our traffic courts and our traffic education program? How can

infractions of laws by minors he handled more adequately? How can both school and community improve the supervised recreational program? How can the health of the community be protected better? The problems related to state and national government are equally numerous.

THE ROLE OF EDUCATION IN A DEMOCRACY

The role of education in a democracy might have been included in the section on problems in community life, but it is considered separately because it deserves special attention (Fig. 4.9). The success of democracies is dependent upon the fact that all the people are able to govern themselves and to contribute to governing others. To insure the proper functioning of organized government, some individuals must accept political office, others must help formulate issues and plans, and everyone eligible must vote. To vote intelligently, a person must know the issues, procure information concerning the parties and candidates, appraise government policies and the role of particular individuals in formulating those policies, recognize propaganda, and evaluate a mass of spoken and printed material in relation to his own concepts of what constitutes good learning. Training in them should be provided by our public schools; furthermore, students should be taught the importance of public education in the efficient operation of democratic government.

Fig. 4.9. How do coöperative projects involving teachers and parents, such as these, contribute to the improvement of education? When should students also participate in parent-teacher projects? (Hillsborough County, Florida, Public Schools.)

The types of public relations program which large cities use to secure support for public education are usually of interest. Such programs are directed to adults, most of whom completed eight years of school and many of whom finished the twelfth grade in a public high school. In view of these facts, is it not surprising to discover that so many people in the community do not realize the importance of public education both for

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6. Discuss areas of life in which coöperation rather than competition rules and others in which the opposite holds true. From which kind of activity, competitive or cooperative, do you derive the greatest personal satisfaction?

7. Define freedom. To what extent are you a free individual?

8. Name classroom practices which reduce opportunity for student growth in self-direction and others which encourage it.

9. Can the larger society or a social group within it, such as the school, develop good morale without faith in progress? Specifically, how can a teacher help his students develop faith in the future?

10. What topics related to understanding and practicing democracy should be included in a high-school program? In a teacher-preparatory program?

11. Describe the community influences on the ideals of high-school students which need continuous examination by school-community groups.

12. Make a plan related to your major field which provides class time in which you can plan and carry through group activities.

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WHAT should a student learn during a year? What should he learn each day? The following objectives, drawn up by five teachers, cover instruction in various units on a given day for an eleventh-grade girl. Each objective is equally applicable to every student in the class.

TYPEWRITING

1. Improves in using the hyphen and the shift-lock key and in using carbon paper with letters.
2. Understands rules for syllabication of words, spelling and dividing words into syllables.
3. Uses the proper forms and terms in addressing envelopes.
4. Wants to be neat in handling and using carbon paper.
5. Wants to use time and materials efficiently.
6. Enjoys the class.

U.S. HISTORY

1. Improves in obtaining information from maps.
2. Becomes more proficient in reading for specific information.
3. Understands cause-and-effect relationships applied to historical events.
4. Uses information about history in analyzing our current problems, policies, and institutions.
5. Develops understanding and appreciation of Washington's role and his policies in this country's early history and its present problems.

ENGLISH

(Focused on Speech Improvement)

1. Improves in interpreting ideas and feelings.
2. Elicits the desired audience response better.
3. Improves in using the body and voice to convey intended meanings.
4. Understands the mechanics of producing classroom plays on the radio.
5. Understands the significance of background music and timing in class-produced radio plays.

HOME ECONOMICS

1. Improves in laying out a pattern, marking it, and cutting it out.
2. Increases skill in stitching, pressing, fitting, and altering; putting in zippers, waistbands, buttonholes, snaps, hooks and eyes.

3. Understands such terms as dart, tuck, pleat, seam allowance, alteration marking, straight-of-goods marking, ease allowance, stay-stitching.
4. Wants to use time efficiently in order to complete garment.
5. Appreciates value of careful marking, cutting, and assembling.

SPANISH

1. Increases ability to think directly in Spanish, rather than in English and then translating.
2. Speaks Spanish more fluently, with correct pronunciation and meaningful expression.
3. Writes Spanish correctly with greater facility, noting spelling, accent marks, and word endings.
4. Increases understanding of written and spoken Spanish.
5. Appreciates the value of using Spanish well, both written and spoken.

It is immediately apparent that the above objectives imply the content and method of instruction and that in this high school instruction in the junior year is organized in separate subject areas. Is this the curriculum of this student? Not completely, but a good portion of it is implied in the objectives. The curriculum of a school is more than the subjects taught and the extra- or co-curricular activities. According to Krug: ". . . The curriculum consists of the means of instruction used by the school to provide opportunities for student learning experiences leading to desired learning outcomes. In most present-day discussion and writing, these means of instruction include the classroom studies, the guidance or counseling program, school and community service projects, school-related work experience, school health services, school camps, the school library, and those activities known as 'extracurricular' or 'extra-class.' " [1]

In this sense, a school's curriculum could be diagramed as all the classes, counseling and guidance activities, etc., which are included in the complete school program. A given student's curriculum could be outlined in the same manner. The most important component in any student's curriculum is his program of class work (Fig. 5.1). This program should enable him to develop understandings, skills, and attitudes that are in harmony with his abilities, needs, and interests, and in line with the democratic ideals discussed in Chapter 4.

In large schools there is considerable separation of "the means of in-

[1] Edward A. Krug. *Curriculum Planning.* New York: Harper & Brothers, rev. ed., 1957, p. 3.

Fig. 5.1. Besides the regular class work such as this, what should each student's curriculum include? (Pittsburgh, Pennsylvania, Public Schools.)

struction" for administrative purposes. This separation is indicated by the titles and duties of the various personnel. (1) The curriculum coördinator, consultant, or director assumes leadership in formulating the school's objectives, coördinating the pattern of school subjects and extracurricular activities, planning curriculum guides, and providing for various aids to classroom instruction. (2) The subject supervisor or general supervisor works with teachers to improve instruction in a particular subject-matter field or related to general problems the teacher encounters. (3) The guidance director or coördinator coördinates the special guidance and counseling program. (4) The health officer is in charge of health services in the school—immunization and vaccination, health inspections, physical examinations, etc. As the titles and descriptions indicate, the tendency is to differentiate according to content of instruction, methods of instruction, and special services. Although this differentiation is useful for administrative purposes, modern curriculum theory recognizes that all the means used to guide students' behavior in desirable directions constitute the curriculum and that it must be carefully organized and controlled because students must perceive the meaning and relationship in all their learnings if education is to be most profitable.

In this chapter major attention centers on four main generalizations in the regular classroom program of instruction:

1. Curriculum terminology must be understood.
2. Course patterns and proposals reflect contemporary society.
3. Teachers participate in overall curriculum development.
4. Teachers bring the curriculum to life in the classroom.

CURRICULUM TERMINOLOGY MUST BE UNDERSTOOD

The need for understanding curriculum terminology becomes apparent when you examine several college catalogues, including that of your col-

lege, along with the curricula of several junior and senior high schools, including the one in which you teach or intend to teach. Another means is to read several recent articles which treat modern problems in relation to the secondary-school curriculum. After completing such a study, try to explain to your colleagues any differences in the various curricula you have examined. In general, you will find that terms which originated before 1920 are clearly defined, whereas those originating since then have become confused because so much experimentation has been carried on. The discussion which follows should help you to clarify the most important terms currently in use.

The time spent in one meeting of a class constitutes a *class period*. In college the fifty-minute class period is frequent. In some junior high schools, class periods may be forty minutes or less, whereas in others one class period may last for the entire morning or afternoon.

In high schools a total of 16 *year units of credit* is usually required for graduation. One year unit comprises a class that meets five days per week throughout the school year, with the class period ranging from forty-five to sixty minutes. Thus, a student who successfully completes a class in English in his sophomore, junior, and senior year receives three year units of credit. For a class in geometry that meets fifty minutes each day during one semester he receives a half unit of credit.

In making out your college program for the quarter or semester, you examined a *schedule of classes* or *timetable* which listed all the classes offered, with the days, hours, place, and perhaps the name of the instructor for each class. The high-school schedule of classes is similarly organized.

A *separate* or *single subject* is subject matter related to a specific group of concepts and processes. Thus, English composition, English literature, American literature, dramatics, journalism, speech, creative writing, and remedial reading are separate subjects in the broader field of the language arts.

The order in which classes or learning activities are organized at the various grade levels constitutes *sequence* in the curriculum. In a curriculum organized in separate subjects, sequence is indicated by a pattern of classes offered in successive years or semesters—for example, arithmetic, algebra, geometry, and trigonometry. The breadth and inclusiveness of the learning activities at a given grade level indicate the *scope* of the curriculum at that grade level. Thus, if arithmetic, algebra, English com-

position, civics, general science, physical education, music, and art are the only classes offered in the ninth grade, the scope of the curriculum consists of the learning activities undertaken in those classes.

Because *course* has several meanings, it can be understood only in context. Throughout high school, for example, you probably had a series of classes, not necessarily separate subjects, in a sequential order which compositely were called the college preparatory course. Other students with different objectives may have taken other specialized work: a home arts course, a fine arts course, a business course, a scientific course. Although the word course is frequently used in this manner, in some high schools the special programs are called *tracks* or *curricula*.

Separate subjects from different fields—American literature and American history, for instance—may be combined and studied simultaneously. In this case the separate subjects may lose their identity and the class or course is said to be *correlated*.

A *broad-fields class* or *course* is one in which single subjects in an area such as the language arts, social studies, science, or fine arts are combined (Fig. 5.2). Thus separate subjects such as history, geography, economics, sociology, and political science are combined into a broad-fields class known as social studies. Similarly, literature, composition, and speech are combined into a broad-fields class called language arts or English.

A class or course which utilizes subject matter from various fields is frequently called *integrated*. The totality of the learning activity—for example surveying life in the local community—is the deciding factor in the selection of subject materials. Subject boundaries are disregarded in an integrated course; the emphasis is on the solution of problems, not on the teaching of subjects as such.

The *core* class includes all the learnings required of all students in a particular grade, such as the ninth or tenth. Many authors use the term not to indicate single subjects that are required but to refer to learnings that are so fundamentally important that they should be mastered by all students. These learnings are generally of the type which cannot be acquired by studying subject matter organized in a pattern of single subjects. The core class combines at least two regular class periods.

Frequently the high school uses one or another of the above terms to identify the design or pattern of its entire curriculum. If the classes required of all students for graduation are organized as single subjects or

emphasize the teaching of subject matter as the chief function of instruction, the curriculum is called a *subject-centered curriculum*. If these classes are organized into broad fields, the curriculum is a *broad-fields curriculum*. If they disregard subject-matter boundaries and instead present learnings that are fundamentally important for all students, the curriculum is a *core curriculum*. Regardless of what these classes are called or how they are organized, most high-school curricula include classes in single subjects or broad fields so that, besides completing the required classes, students may specialize in an academic or vocational track.

When the whole curriculum is described in terms like these, there is difficulty in understanding what it covers. The term *child-centered curriculum* indicates a pattern which attempts to include learnings that are based on discovering the expressed interests of the students. The *experience curriculum* places less emphasis on expressed interest and more on learning activities in which the students work physically and mentally on problems they help to originate and define. Some schools now call their whole program a *life-adjustment curriculum*. In other schools the part required of all students is called the *general education curriculum*. One common feature of all these later trends is that, regardless of how the terms are

Fig. 5.2. What advantages are possible with broad-fields classes, such as general science and general shop? Are the advantages greater in the junior or senior high school? (Top, Toledo, Ohio, Public Schools; lower, Hillsborough County, Florida, Public Schools.)

used, each originally arose from the attempt to break down the single-subject curriculum pattern in order to make learning activities more valuable to students.

From the definition of curriculum given earlier in this chapter, we see that it is unwise to designate a whole curriculum design in terms of the goals to be sought, the teaching methods employed, or class organization in the part that is required of all students. An understanding of curriculum terminology and organizational procedures is equally important because the teacher, working within an already established curricular pattern, attempts to provide learning activities that will achieve both the general goals of secondary education and the more specific objectives of classroom instruction.

PATTERNS AND PROPOSALS FOR COURSES REFLECT CONTEMPORARY SOCIETY

There are many different patterns of organizing courses in our junior and senior high schools today. As a rule, a certain number of specified courses are required of all students for graduation. In addition, each student selects a particular track or course—academic, business education, vocational—in which he must take certain classes. He may also take certain electives—machine operation or office practice, for example, if he is pursuing business education—and free electives not directly connected with his course. Students may receive credit toward graduation by participating in such school activities as music or athletic programs, counseling, student government, a school-community project, or work in a community business enterprise. This has not always been the case in secondary schools, as we shall see in the discussion that follows.

THE LATIN GRAMMAR SCHOOL, 1635

The traditional European secondary school, in the form of the Latin Grammar School, was introduced in the American colonies in 1635. It had one major purpose—to prepare a small number of young people for college. The curriculum consisted primarily of instruction in Latin, with small amounts of Greek and religion. At that time Latin was used by ministers, magistrates, and teachers of Latin, among others. Harvard College, founded in 1636, set the pattern for college domination of the secondary-school curriculum. Its admission requirements in 1642 included reading

Cicero at sight, reciting Latin poetry and prose, and conjugating Greek verbs. Other colleges established after 1636 had similar entrance requirements. The curricula of other Latin grammar schools established after 1635 laid heavy emphasis on Latin and Greek, the two inescapable requirements for admission to colonial colleges.

The Latin grammar schools continued to dominate secondary education until 1753, when Franklin's Academy was chartered in Pennsylvania. Benjamin Franklin, its founder, proposed that curricula be more practical for young people and that such education be available to more of them. The subjects he proposed—many of them were not adopted—included writing, drawing, English grammar, composition, literature, arithmetic, geometry, astronomy, history, science, agriculture, gardening, and mechanics. No religious instruction was provided.

Other academies were founded after 1753, some privately endowed, some supported by religious groups, some publicly supported. The movement expanded in New England and the Middle Atlantic states until 1840, when college and university entrance requirements came to dominate the curricula; for academy students, too, came from relatively wealthy homes and usually went to college after graduating from an academy.

The academy is chiefly responsible for freeing the curriculum of religious subjects, opening secondary education to girls, and providing practical courses for young people.

The Latin school and the academy did not meet the needs of people who could not afford to pay the tuition and boarding expenses required for such education. Free elementary-school education was provided for children of the middle classes, but this economic group wanted public-supported secondary education as well. The English High School, established in Boston in 1821, was the first attempt to meet this need. It was a three-year high school designed for boys twelve years or older who did not intend to go to college. The curriculum featured English composition, geography, arithmetic, algebra, geometry, surveying, navigation, United

States history, and natural and political philosophy, but included no foreign languages or religion.

In 1827 Massachusetts required that each town having five hundred or more families establish such a school. Thus in the New England states, Latin schools and academies, which usually required fees, and English high schools, which usually required no fees but had comparatively few pupils, both served as secondary schools. It remained for the frontier section—the region now called the North Central states—to establish the free public high school open to everyone of school age.

THE FREE PUBLIC HIGH SCHOOL, 1874

The idea of creating one public-supported secondary school for all youth was implemented in Michigan in the Kalamazoo case in 1874, when the supreme court of that state ruled that school boards could levy and collect taxes for the support of secondary schools. This precedent was widely followed in the neighboring states—Wisconsin, Illinois, and Indiana. States admitted to the Union after 1874 also provided for free secondary schools. This decision brought to an end the establishing of new Latin schools and academies. By 1900 the free public high school was universally accepted as a continuation of the elementary school.

The new high schools drew upon established institutions for curricular patterns. Colleges and universities continued to stress certain abilities and performances and to specify credit requirements in Latin, mathematics, and other subjects.

PROPOSALS OF NATIONAL COMMITTEES, 1895–1911

The Committee on College Entrance Requirements began its work in 1895 and issued its first report in 1899. The committee strongly approved of the inclusion of Latin, Greek, French, German, English, history, civics, economics, geography, biology, chemistry, and mathematics in high-school curricula. In general, it confirmed the report made by the Committee of Ten in 1893, which recommended four types of secondary-school courses as college preparatory: the classical, which included two ancient and one modern foreign language; the English classical, which included one ancient and one modern foreign language; the modern language, which included two modern languages; and the scientific, which included

one foreign language. Many members of both committees were on the staff of various colleges and universities, a fact that probably accounts for the emphasis on the college preparatory function of secondary education at the expense of making high-school education appropriate for students who did not go to college.
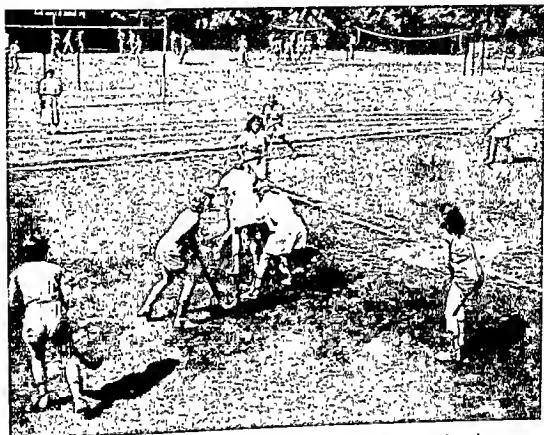
Fig. 5.3. Should physical education be required for graduation? Should credit be given for such classes as this? (Pittsburgh, Pennsylvania, Public Schools.)

To clarify the role of the high school in preparing for college entrance, the Committee on College Entrance Requirements recommended that each student's high-school record show that he had completed four units in a foreign language, two units in English, two units in mathematics, one unit in history, and one unit in science; four hours of class attendance per week throughout the school year was to constitute a unit. In 1906 the Carnegie Foundation for the Advancement of Teaching proposed that

five periods of class work per week throughout the school year constitute a unit; this became known as a Carnegie unit.

The recommendations of the Committee on Entrance Requirements were upheld by the Committee of Nine on the Articulation of High School and College, when in 1911 it proposed that the high-school program include fifteen units, of which three should be in English, one in social science, and one in natural science. Furthermore it proposed that all high schools offer three units each in two majors other than English and two units in one minor. The two majors were to be selected from Latin or a modern language, mathematics, social science, or natural science. The requirements for graduation should not specify more than two units of mathematics or two units of a foreign language. Thus eleven of the fifteen units would be drawn from the five subject fields specified for majors, and the other four units could be taken in mechanical arts, household science, commercial work, or any other field that best met the interests of the student. Physical education should also be required but without credit toward graduation (Fig. 5.3).

Generally, the recommendations of these committees were widely adopted in the secondary schools of that period, continued to exert a strong influence throughout the 1920's, and are still in force in some high schools today. Here is a transcript of credits from a four-year high school that was issued in 1931:

English	4 units	Geography	1½ units
Latin	3 units	Biology	1 unit
European history	1 unit	Physical education	½ unit
American history	1 unit	Health	½ unit
Economics	½ unit	Art	½ unit
Civics	½ unit	Music	½ unit
Commercial arithmetic	1 unit		
Algebra	1½ units		
Plane geometry	1 unit		

Note that the four completed majors—English, foreign language, social studies, and mathematics—and the minor, science, are the five that were proposed as majors in 1911. Note also that all except the last four subjects were included in the 1899 proposals of the Committee on College Entrance Requirements.

The above school was a small consolidated school in a rural area of southern Indiana. Every ninth-grade student in it was required to take Latin and algebra. Every student had to complete at least sixteen units, of which not more than four could be elected. Less than one-third of the students who entered the school graduated. Considerably less than half those who finished the eighth grade started the ninth. From 1927 to 1931 there were no classes in agriculture, business, industrial arts, physics, chemistry, dramatics, speech, orchestra, or band.

EXPERIMENTATION SINCE 1918

The cardinal principles of secondary education stated by the Commission on the Reorganization of Secondary Education in 1918 did much to focus educators' attention on the problem of designing a curriculum that would achieve objectives of health, command of fundamental processes, good home relations, vocation, citizenship, profitable use of leisure, and good character. Since that time both junior and senior high schools have experimented with curriculum design and practice.

One comprehensive study which gave great impetus to this experimentation was the Eight-Year Study, sponsored by the Progressive Education Association and directed by Wilford Aikin, which began in 1933. A broad range was represented by the thirty secondary schools which participated in the study—private and public, large and small, traditional and progressive. Some three hundred of our colleges and universities agreed to admit graduates of these thirty schools without the usual required subjects.

Curriculum consultants worked with the staff of the schools in redesigning their curricula to include the following general objectives: greater mastery and continuity of learning, clearer understanding of contemporary social problems, development of a sense of responsibility, freer release of creative energies, greater freedom of choice for students and teachers, and more emphasis on student counseling. In reorganizing their curricula, the various schools used broad-fields, correlated, integrated, and problem-type approaches. The study classified as "least progressive" the schools which followed most closely the "traditional" program of separate subjects and college preparatory classes, and as "most progres-

sive" those that departed most from this traditional program. An evaluation staff under the direction of Ralph Tyler devised unique instruments and procedures to evaluate the results of the experiment.

The first graduates of the thirty participating schools entered college in 1936, and their college career was followed to discover how they did. In this follow-up, 1475 graduates of the thirty schools were paired with 1475 graduates of conventional high schools. The pairs were equated in IQ score, scholastic aptitude, age, sex, and socioeconomic background. Some of the more important conclusions reported by the researchers follow. The graduates of the thirty schools:

1. earned a slightly higher total grade average;
2. earned higher grade averages in all subject fields except foreign language;
3. specialized in the same academic fields as did the comparison students;
4. did not differ from the comparison group in the number of times they were placed on probation;
5. received slightly more academic honors in each year;
6. were more often judged to possess a high degree of intellectual curiosity and drive;
7. were more often judged to be precise, systematic, and objective in their thinking;
8. were more often judged to have developed clear or well-formulated ideas concerning the meaning of education—especially in the first two years of college;
9. more often demonstrated a high degree of resourcefulness in meeting new situations;
10. did not differ from the comparison group in ability to plan their time effectively;
11. had about the same problems of adjustment as the comparison group, but approached their solution with greater effectiveness;
12. participated somewhat more frequently, and more often enjoyed appreciative experiences, in the arts;
13. participated more in all organized student groups except religious and "service" activities;
14. earned in each college year a higher percentage of non-academic honors (officership in organizations, election to managerial societies, athletic insignia, leading roles in dramatic and musical presentations);
15. did not differ from the comparison group in the quality of adjustment to their contemporaries;
16. differed only slightly from the comparison group in the kinds of judgment about their schooling;

17. had a somewhat better orientation toward the choice of a vocation;
18. demonstrated a more active concern for what was going on in the world.[2]

This study definitely indicated that the usual college preparatory high-school track or course could undergo considerable revision without interfering with the success of students who went to college. Note that most of the items involving academic success showed the two groups to be about equal; those involving nonacademic areas indicated that the graduates from the progressive schools were somewhat superior.

Considerable experimentation in curriculum practices, especially those related to classes required of all students, is apparent in Alberty's recent work. He identified six types of programs that were operating in schools under the title "core":

1. The core consists of a number of logically organized subjects or fields of knowledge, each of which is taught independently. . . .
2. The core consists of a number of logically organized subjects or fields of knowledge some or all of which are correlated. . . .
3. The core consists of broad problems, units of work, or unifying themes which are chosen because they afford the means of effectively teaching the basic content of certain subjects or fields of knowledge. These subjects retain their identity, but the content is selected and taught with special reference to the chosen unit, theme, or problem. . . .
4. The core consists of two or more subjects or fields of knowledge which are fused into a unified whole. Usually one subject or field (e.g. history) serves as the unifying center. . . .
5. The core consists of learning experiences selected from broad preplanned or problem areas, in terms of the societal and psychobiological needs and interests of the students. . . .
6. The core consists of broad teacher-student planned units of work, or activities, in terms of needs, problems, or interests as perceived by the group. No basic curriculum structure is set up.[3]

Cores of the third and fourth types are now especially prevalent in the junior high school.

Generally, experiments in combining subjects and thus making longer

[2] By permission from *The Story of the Eight-Year Study* by Wilford Aikin. Copyright, 1942. McGraw-Hill Book Co., Inc.
[3] Harold B. Alberty, *Reorganizing the High School Curriculum*, rev. ed., 1953, pp. 167, 168. By permission of The Macmillan Company.

class periods possible are undertaken to find out whether this procedure is better than short class periods which emphasize mastery of subject knowledge as such (Fig. 5.4). The following are some of the criteria used in this connection:

1. Can the teacher understand individual students better?

2. Can the teacher help them more effectively with their academic and personal problems?

3. Can the problems common to a group of students be discovered more accurately and handled more efficiently?

4. Can social interaction and human relations in a democratic society be explored more fully so that students will develop more effective skills in these areas?

5. Can instruction be provided that is more in harmony with the dynamic and continuous nature of the learning process?

6. Can students share in planning, executing, and evaluating learning activities more effectively?

7. Is more meaningful learning made possible, such as that involved in field trips and broader problem-solving activities?

8. Do students learn the required subject-matter knowledge and skills better when they are used as tools in solving problems?

Fig. 5.4. The students in these two pictures are working on out-of-school projects—planning a community survey and learning how to judge sheep. Neither of these activities would be possible unless long class periods were available. (Top, Pittsburgh, Pennsylvania, Public Schools; lower, Los Angeles, California, City Board of Education.)

PRESENT CONTENT OF COURSES

Basing his work mainly on studies made by the U.S. Office of Education, Kenneth Hovet has described what is being taught in our high schools.[4] Some of his findings and interpretations are presented in the following paragraphs.

For graduation, 16 Carnegie units are commonly required in both required and elective courses in Grades 9-12. The range in requirements in all the high schools within a state varies from half a unit in Michigan to eleven in Missouri. If it were feasible to hazard a national "average" of required courses, it would be English, 3 units; social studies, 2 units; mathematics, 1 unit; science, 1 unit; health, 1 unit. The remaining eight units would be obtained partly in these five areas and partly in such fields as business education, home economics, art, and music, among others.

The range of courses offered increases as the total enrollment rises; in Grades 7-12 some 500 discernibly different courses are given. A number of activities formerly called extracurricular are now offered as elective courses for credit. Some of the courses offered for the first time during the period 1934 to 1949 include: radio speaking and broadcasting, remedial English, creative writing; Latin-American history, consumer education, orientation; core; conservation, fundamentals of electricity, advanced general science, advanced biology, advanced chemistry, aeronautics, earth science; mathematics review; Russian, Portuguese; photography, home mechanics, handicrafts, plastics, transportation laboratory; general industrial shops, diversified occupations, vocational radio, aviation trades, cosmetology; coöperative store training, coöperative office training, retailing, consumer economics; consumer buying, home management; safety and driver education; music appreciation, harmony, theory, and practice; preschool service art; special classes for the handicapped and mentally retarded.

Subjects no longer offered during the same period included English history, industrial history, nature study, the novel, and the short story.

4 Kenneth Hovet, "What Are the High Schools Teaching?" in Association for Supervision and Curriculum Development, *What Shall the High Schools Teach*, Washington: National Education Association, 1956, pp. 69-94.

Hovet concludes his analysis of the courses offered in our high schools as follows:

1. Schools in general are requiring 16 Carnegie units for graduation, of which 8 are commonly prescribed and 8 are elective. Wide differences occur in ways of meeting requirements in both prescribed and elective subjects.

2. Schools are scheduling students for the full school week, and more and more students will probably graduate with more than 16 Carnegie units.

3. Course offerings are increasing with no end in sight, and only uncertain statements can be made that course offerings are either too many or too few.

4. Adjustment to the needs, interests and abilities of students in the total school program is achieved through the four main "curriculums": academic, vocational, commercial, and general. Within each of the four, a student may work his way along various available "tracks."

5. Adjustment to pupils within courses is made primarily through various interpretations of the "activity-experience" approach, which has led to some uncertainty about how content in one course differs or ought to differ from the content of another.

6. Adjustment is made by teachers within individual classes, placing a heavy burden upon the knowledge, training, experience, and general skills of the teacher in that particular class.

7. Adjustment goes on continuously in all parts of the country in that school personnel are practically everywhere engaged in a tremendous amount of work in the way of course development and revision.

8. Whether because of adjustment or for other reasons, the holding power of the high school is better than it has ever been, and it seems to be growing stronger.

9. Adjustment of the school program to the manpower needs of the nation is becoming a problem of increasingly grave concern.[5]

The elective system and the wide range in courses, just described, are not limited to the senior high school. In many junior high schools elective subjects are first offered in the seventh grade, and it is not uncommon to find that less than half of the subjects are required of all the students. The tendency is toward elective courses patterned on those in the senior high school. To the extent that junior-high-school students are required to take many different "common" and elective subjects taught by many different teachers in short class periods each day, the junior high school may fail to achieve any of the four main functions for which it is designed: (1) to meet the needs peculiar to students, some of whom are still children and others relatively mature; (2) to provide an educationally sound transition

[5] *Ibid.*, p. 94.

from Grades 6 to 7; (3) to develop increasing competence in foundation learnings—reading, spelling, writing, composition, arithmetic; and (4) to instill democratic practices and ideals.

THE TWELVE-MONTH SCHOOL

For some years Rochester, Minnesota, and Lexington, Kentucky, have been conducting a full program of education the entire year—during the summer months as well as the "regular" school term. The Arrowhead High School in Hartland, Wisconsin, is planning a similar program. Schools in many states, particularly in California, Michigan, New York, and Wisconsin, conduct summer camps.

Will the twelve-month school, with four to six vacation periods of one to two weeks each distributed through the calendar year, become common? Over a period of fifty years, the school term has typically increased from eight to ten months. During the same period the work week in industry has decreased from about fifty to forty hours, and the prospect is that a thirty-hour week will soon be adopted in leading manufacturing industries. Because this will mean decreasing opportunity for youth in our cities and suburbs to find jobs during the summer, the school term will probably be lengthened to eleven or twelve months.

TEACHERS PARTICIPATE IN OVERALL CURRICULUM DEVELOPMENT

Who should decide what students are to learn in the junior and senior high school, and why, when, and how they learn it?

Many persons contribute to this decision. Those who by the nature of their interests, abilities, and preparation should be most able to answer the when and how are school people—teachers, curriculum coördinators, administrators, guidance workers, and other specialists. These same persons, who themselves often have children in school, should have considerable voice regarding the what and why aspects. But students, parents, and others in both the immediate and the larger community also must contribute their ideas to the what and why and, to a lesser extent, the when and how. Unless history has taught us nothing, it is unwise to allow any small group to decide these matters. As we saw both in Chapter 2 and in the present chapter, curriculum-recommending groups who were dominated by specialists in subject-matter fields in our universities favored only subjects that were suitable for the students with top ability who in-

tended to go on to college. Our high schools must provide good education for all, not only for those who are bound for college.

The teacher can participate in planning the school curriculum in many ways: doing the best possible job in the classroom, attempting to develop the learnings that are considered important; working with the school committee that is concerned with his major subject-matter interest; working with a school committee on the total curriculum for one grade or for all grades; and working with a committee on special projects such as guidance, students' progress reports, school-community relations, and the like. Since part of the curriculum is prescribed in most schools, the teacher can also work with groups in the local district and the state. In addition, committees are now active at both the national and the international level.

Some committees are made up solely of teachers; this is especially true of committees concerned with how to teach. But committees that are considering content—perhaps the required and elective courses to be offered in a grade or school—should include parents, someone representing the school administration, a curriculum expert if available, and a student representative. The present author, himself a parent, recently served one year as program chairman of a Parent-Teachers Association committee in his school district; the topic under discussion was the curriculum, kindergarten to Grade 8. The committee included a teacher, the principal, curriculum experts, and parents. Late in the year, a questionnaire was sent to all parents in the school district. The results led the PTA to recommend that instruction in a foreign language be provided for all children, starting in Grade 4. It is doubtful that such a recommendation would have originated from a committee of teachers. How successful and valuable the program will be remains to be seen.

When teachers, parents, and others interested in education coöperate in curriculum development, progress will follow. As competing pressure groups attempt to influence the curriculum, progress may be made over a long period of time; but there may be so much dissension in some schools for a short time that at least some and perhaps all of the students will suffer. Coöperation and the resulting improvements are vitally needed at present. Progress has been made over the past century in the following directions:

Change from the faculty psychology of learning with emphasis upon memorization and mental discipline to an organismic, dynamic psychology with emphasis upon the powerful forces of purpose, meaning, goal seeking, differentiation and integration in the learning process. . . .

Change from reliance on tradition and subjective judgment as a basis for educational procedures to concern for scientific research and the application of scientific method and findings. . . .

Changes in methods and materials that have grown out of the idea that how we learn is as important as what we learn. . . .

Changes in patterns of participation in curriculum building. . . .

Involvement of classroom teachers in curriculum revision has continued as a practice in forward-looking schools and school systems, both as a means of in-service education and as a way of insuring sound curriculum improvement. . . . More recently the philosophy of democratic participation and the recognoition of the dynamic nature of learning have led to emphasis upon teacher-pupil planning. . . . Most recent is the movement to include parents and other citizens of the community in curriculum building. Lay or parent advisory councils are being organized to confer with curriculum committees on the goals to be achieved and the outcomes to be reached.[*]

TEACHERS BRING THE CURRICULUM TO LIFE IN THE CLASSROOM

Organizing purposeful learning activities for students was given primary attention in Chapter 3. Any curriculum or series of objectives will fall far short of achievement unless teachers can make them come to life in the classroom. The many statements of objectives and lengthy outlines of courses that are printed often fall short of the mark because they do not become realities in the lives of students (Fig. 5.5). We have frequently mentioned the need to understand each student and to provide activities suited to his learning abilities. Yet at least two groups of students are not being provided for as well as they might be: the slow learners and the rapid learners. Although we are undoubtedly doing better than any other country today with both these groups, there is still much need for improvement. Too often, in the classes required of all students and in some of the electives, the slow learners can find no purpose in the teacher's assignments because they cannot understand them; similarly, the fast learners find little if any purpose because the work is

[*] Association for Supervision and Curriculum Development, *One Hundred Years of Curriculum Improvement, 1857-1957*, Washington: National Education Association, 1957, pp. 3–8.

not challenging. If those responsible for the school curriculum could arrange the required work so that every student found purpose in learning, everyone would be benefited—the student, the school people, the parents, and society in general.

SUMMARY

A most important differentiation in curriculum terminology concerns that between a subject and subject matter. Subject is the term used to designate an area of organized knowledge; it is indicated by such titles as English literature, American history, art appreciation. Subject matter connotes the understandings, skills, and attitudes related to any student activity or class. Thus, the subject might be "Problems of American Government," but the subject matter of one unit might be the problems which arise in student government. The subject matter the student acquires in high school cannot be considered as synonymous with the subjects he has taken. In reading about or discussing curriculum problems involving such terms as subject, core, common learnings, general education, progressive education, life adjustment education, academic disciplines, make certain either that you attach the same meanings to the terms as the writer or the other parties to the discussion or that you understand the different use of the terms.

Education has progressed far from the Latin Grammar School of 1635, and generally in a desirable direction. The modern period began with the establishment of the free public high school in 1874, an institution that

Fig. 5.5. How can teachers make curriculum proposals become realities to their students? (Top, Los Angeles, California, City Board of Education; lower, School District of the City of Berkley, Michigan.)

is closely related to the demands and needs of a people becoming urbanized. Much experimentation in the education of students twelve to eighteen years of age has occurred since 1918, and the tempo of change and experimentation is accelerating. The curriculum trends relating to class work include the following: more core classes, especially in Grades 7, 8, and 9; more subjects in all fields as the demand for specialization increases; more adequate provisions for both slow and rapid learners; a longer school term, a higher percentage of students finishing high school; more students going to college. Considerable research and experimentation are still needed to decide, for example, what learnings individual students can acquire and how they can do so most efficiently; what learnings are valuable to all students and how they can be acquired in the classroom; the extent to which the high school can and should prepare students to meet their future responsibilities as parents, employees, and citizens without further formal education; the extent to which students who are going to college should specialize in narrow subject fields such as science or business education in high school. These are curriculum problems which teachers, because of their education and professional competence, should share in solving by being open-minded about experimentation and by participating in curriculum-decision groups at every level, up to and including the national. It is in the classroom that the emphasis on the learner, the purposive nature of learning, the ideals of democratic living, and the values of particular subject matter bring out clearly the differences between a good and poor curriculum.

Questions and Activities

1. Organize the objectives in the eleventh-grade girl's five classes under the headings of understandings, skills, and attitudes or values. Should she achieve these objectives over a reasonable period of time? How will her class work contribute to the ten imperative needs of youth stated in Chapter 1? How well will her school aid her as far as the seven developmental needs in Chapter 2 are concerned?

2. Briefly, define separate-subject, broad-fields, and core class. List the courses during your last year of college which fit each definition.

3. Compare your high-school transcript with the major, minor, and unit recommendations made by the Committee on College Entrance Requirements in 1911.

4. What main ideas about curriculum design and success in college do you derive from the Eight-Year Study?
5. For Grades 7–12, list the different subjects that you think should be offered in your major field of study. Indicate how the subject matter in any one grade might be handled in a core class with subject matter from other fields. In a broad-fields approach. In a child-centered approach.
6. Teachers often have five classes with 25 to 40 students in each class. So much time is required to prepare for and teach these classes that little time is left to learn to know each student well, much less make adequate provisions for him. How could curriculum revision improve this situation?
7. Discuss the role of the principal, the teacher, students, and parents in deciding what should be learned in a given class. In deciding how the students should be taught.

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PART II

Creative Teaching-Learning Activities: Developmental Sequence

6:

Unit and Daily Planning

IN ANY kind of planning which directs action, such as an architect's blueprint of a home or a scientist's outline of an experiment, three stages can be identified. (1) An overall design or blueprint of action is outlined. This is a clearly defined statement which delimits the total structure and indicates the major activities and kinds of materials necessary for the desired result. (2) This overall plan is broken down into cohesive units which are outlined in more detail. Each unit is relatively independent, but does not vary to such an extent that the total result will be greatly altered. (3) Specific details within each unit are described. The details show most variation in any kind of planning and are most adaptable to the specific situations and resources that are available when the plan is put into effect.

These three stages correspond to overall planning, unit planning, and daily planning in teaching. Overall planning is comparable to the broad organization of the school curriculum discussed in Chapter 5. In the present chapter, unit and daily planning are considered in terms of four principles:

1. Unit planning is flexible.
2. The resource unit is developed coöperatively.
3. Planning the teaching-learning unit provides overall direction of learning.
4. Daily planning implements the unit.

All planning, both preclass and that done by teacher and students in the classroom, is intimately related to the general goals of secondary education (Chapter 1), the characteristics of the students (Chapter 2), the nature and conditions of meaningful learning (Chapter 3), the ideals of democratic living (Chapter 4), the overall school curriculum (Chapter 5), the nature of the particular learning outcomes sought (subject matter), and the teacher's skills.

UNIT PLANNING IS FLEXIBLE

A unit is always planned for more than one class period; it may be for a week, a month, or a semester. One month or one reporting period is frequently used as the basis. The main reason for using a longer period is

that it is extremely difficult, if not impossible, to use time efficiently in teaching when each day's work constitutes a complete learning experience in itself. Students often cannot discover the relationship between the successive unrelated daily experiences and therefore fail to organize these experiences into a meaningful pattern of learning.

Units may be based on content in a single subject, such as a unit on modern short stories in a class in literature; on content that crosses single subject lines into broad fields, such as a unit in social studies—how air transportation affects social, economic, and political life in a community; or on projects or problems which draw upon information from various fields—for example, improving recreational facilities in the school and community.

Units usually include many different kinds of student activities: reading from various sources, listening to teacher or classmates, doing individual and committee work, carrying on group discussion, making written and oral reports, visiting outside the classroom, constructing articles in which creative and artistic talents may be employed; dramatizing; experimenting; observing and analyzing films, and so on (Fig. 6.1). In classes such as beginning typing and shorthand the variety of activities is not so broad as in social studies and English. However, in all classes the order in which activities are planned is determined by one's concept of the successive steps students go through in learning the understanding or skill.

Student participation in planning the unit after instruction has begun varies widely, depending on the competence of the students, the nature of the learning outcomes desired, and the teacher's competence and preference, the latter also reflecting the requirements laid down in the broad curriculum plan. For example, seniors might share more in planning than a seventh-grade group would. Greater participation by students would be required in any class intended to develop desirable attitudes and group skills than in a class in which an individual skill is to be developed, as in beginning swimming, French, or typing. The beginner cannot decide wisely regarding such matters as sequence of activities and desirable content. To the present author, from his observation of many classes each year and his work on local and state curriculum committees, the principal criterion governing the extent to which students share in planning

seems to be the preference and competence of the teacher. Some seniors participate less in planning in problems of democracy than seventh-graders do in their social studies classes.

As suggested in Chapter 4, learning is usually enhanced when students help plan some details of their work; therefore, preplanning should include provision for student participation. As was also brought out in that chapter, groups need good leadership. The teacher who does not preplan runs the definite risk of falling into all the pitfalls inherent in laissez-faire leadership.

THE RESOURCE UNIT IS PLANNED COÖPERATIVELY

A resource unit is usually worked out by a group of teachers in coöperation with a curriculum coördinator; the general plan as well as specific parts of it may be used in a number of different teaching situations. Resource units that are published usually have the following parts: (1) a title; (2) a relatively long introductory statement of facts and information related to the unit topic, such as *The Health of a Nation* or *Planning in Democracy*,[1] (3) a statement of objectives or outcomes, (4) suggested problems and questions, (5) suggested activities, (6) evaluation procedures, and (7) a bibliography of teaching aids—books, pamphlets, films, recordings, and community resources.

Many suggestions are made in relation to activities and instructional materials. Of these suggestions, the teacher selects and, if necessary, adapts those which may be useful in a specific situation. Resource units are helpful in planning class activities, in preparing a teaching-learning

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[1] The first title is that of one of twenty-two resource units published jointly by the National Council for the Social Studies and the National Association of Secondary School Principals. The second is one of a series published by the National Council for Social Studies.

Fig. 6.2. Why is more of the teacher's time required when the students share in planning, than when the teacher does the planning independently? (Wilmington, Delaware, Public Schools.)

unit, and in securing a broader understanding of the instructional techniques used by other teachers in the same general area. Working out resource units enables teachers to locate and solve common teaching problems, secure concrete suggestions which may be put into practice immediately, and draw up guides for instruction that are often more useful than those in printed curriculum guides.

PLANNING THE TEACHING-LEARNING UNIT PROVIDES OVERALL DIRECTION OF LEARNING

A teaching-learning unit is organized by a teacher for a specific group of students. Usually the unit is completed before actual teaching begins. Although it includes the parts listed above for the resource unit, the content outline, activities, use of textbooks and other materials, and evaluation procedures are formulated in the manner and sequence in which they will be used.

Teaching-learning units vary widely as far as student participation in planning is concerned. Some teachers distribute copies of the unit to guide the students' work. In such cases the teacher definitely prepares the unit for student use. Dates upon which assignments are to be completed, selections to be read, tests to be given, and class discussion to be held, and also the sequence in which activities are to be completed are clearly specified. Provision may or may not be made for students to choose from various assignments or activities. Other teachers write the unit for their own use and incorporate in it provisions for the students to share in defining objectives, deciding content, planning activities, and devising evaluation procedures. Allowing students to participate in planning does not mean that the teacher spends less time in planning; on the contrary, more time is usually required (Fig. 6.2).

The teaching-learning units in the following discussion and those illustrated in the next two chapters allow students maximum participation in planning as soon as they are ready for it. As you analyze the following

outline, decide where definite provisions should be made for students to share in planning after instruction is under way.

FRAMEWORK FOR A TEACHING-LEARNING UNIT

I. Introductory statement.
   A. State the age and grade level for which the unit is planned.
   B. Indicate the length of time needed for the unit.
   C. Show briefly how this unit fits into the overall plan.
II. Objectives stated as understandings, skills, and attitudes.
   A. Outline the specific understandings which students will develop.
   B. State the specific skills which students will acquire.
   C. Outline the specific attitudes which students will develop.
III. Content outline.
   A. Outline the major subject-matter content, or
   B. Outline the problems to be solved, or
   C. Outline a series of projects to be completed.
IV. Activities in which students will engage.
   A. Initiatory activities.
      1. Outline a series of activities which will get the students off to a successful beginning. Indicate the sequence of these activities on the basis of your ideas as to how to initiate a good teaching-learning situation.
      2. Indicate the time that will probably be required for initiating the unit.
   B. Developmental activities.
      1. Outline the activities in which the students will engage to develop understandings, skills, and attitudes. Indicate sequence in terms of the order in which you think these are learned.
      2. Estimate the time needed to carry out this phase.
   C. Culminating activities.
      1. Outline a summarizing activity or group of activities to which each student can contribute, to which the whole group will direct its effort during the major portion of the learning period, which will best satisfy each student's need for approval from classmates and others, and which will promote good attitudes toward classmates, teacher, school.
      2. Indicate the estimated length of time necessary for this phase, allowing for appropriate student participation.
V. Materials and resources.
   A. Locate reading materials, audio-visual materials and demonstration and experimentation materials which are needed to make the activities worth while.

B. Locate and outline facilities in the school (outside the classroom) and in the community which will be used.

C. Devise procedures for bringing people from the community to the classroom and for taking the students into the community.

D. When it is necessary for students to make contact with persons outside the classroom or to secure materials, outline the procedures you will use to facilitate these activities.

VI. Evaluation procedures.

A. Outline the procedures you will employ to determine where students are when the unit starts.

B. Outline the methods you will use in assisting students to measure their own progress.

C. Outline the procedures you will use to measure student growth in understandings, skills, and attitudes during the entire unit.

In using this framework for planning units, you will have to adapt it, by varying the emphasis on the various parts to the learning proposed and the characteristics of the adolescents you are teaching. The following material from a workbook [2] correlated with a science textbook, organized by the present author under the above six main headings, will help you visualize this unit outline:

I. Introductory statement:

A. Grade level: Seventh.

B. Length of time: One year; class meets one hour per day, five days per week.

II. Major objectives to be achieved:

A. Understandings: The student understands better (1) the reasons for fingerprints, (2) blood types, (3) the effects of light, (4) rudiments of atomic energy, (5) changes which occur in his skin, (6) forest fires, (7) growth of trees, (8) behavior in relation to food in the body, (9) weather changes, (10) functioning of electric motors, (11) plant reproduction, (12) growth of teeth, (13) functioning of railroad engines, (14) source, use, and conservation of water in the community, (15) kinds of rocks in the community. Students use facts and principles related to these objectives as tools in analyzing the cause and results of events, and in predicting and explaining these results.

B. Skills: The student:

1. Uses scientific information to predict what will take place in the human body.

[2] Donald G. Decker, *A Teacher's Manual to Accompany How and Why Explorations, Book VII*, Syracuse: L. W. Singer Company, 1948, pp. 1–104.

2. Uses scientific information to explain events in his home.
3. Uses scientific information to explain events in his community.
4. Uses these steps in problem solving—identifies problems, gathers information, analyzes it, synthesizes it, draws conclusions, and tests conclusions.
5. Uses an index correctly.
6. Obtains information from maps.
7. Reads for specific information.
8. Selects main ideas in a paragraph.
9. Selects information from a table.
10. Uses printed cues—italics, for example—when reading.
11. Records information accurately in graphic form, as in charts or diagrams.
12. Uses safety skills.
13. Experiments as a source of information.

III. Content outline:

The content is implied in the understandings and skills in the preceding section of this outline.

IV. Activities:

The sequence of fifteen units is exactly the same as that in the fifteen objectives under understandings. Each unit has a title similar to that used in the understandings, and the amount of time for each unit is suggested.

The sequence of activities in each unit follows the six steps in problem solving listed in Number 4 under skills:

A. Initiatory activities:

Student activities involving listening, reading, discussing, and observing films and demonstrations are utilized to identify problems, to secure an overview of the unit, and, with the teacher, to plan procedures for securing information. Written exercises are used to achieve skill in identifying and stating problems and in planning procedures.

B. Developmental activities:

1. Such activities as reading the textbook and other materials, doing exercises in the *Companion Book*, listening, observing teacher demonstrations, securing data through experimentation, and gathering materials and information outside the classroom are used to establish understandings and discover applications. Skills in analyzing and synthesizing information are developed by means of written and oral exercises.

2. Making graphs, charts, and maps, writing reports, and examining information presented this way are used for developing particular skills and understandings.

C. Culminating activities:

        1. Discussing, writing, listening, and experimenting are utilized to fix understandings and skills, to discover further applications, and to test generalizations.

V. Materials and resources in the school and community:
- A. Material resources are organized under six general headings:
  1. Planning the *science room.*
  2. Planning and purchasing equipment.
  3. Preparing home-made equipment.
  4. Using visual aids, including suggestions for films and slides.
  5. Providing practical references for students and teacher.
  6. Listing pages in the textbook and the *Companion Book* related to each unit.
- B. Community resources are outlined; representative examples include:
  1. Inviting to the classroom a policeman who is a fingerprint expert to explain how fingerprint identifications are made.
  2. Inviting to the classroom a nurse or a parent to explain the diet a diabetic child must have.
  3. Securing blood from a hospital for study in the classroom.
  4. Securing passports from those who have them for classroom examination.

VI. Evaluation procedures:
- A. The teacher records each student's achievement of above listed objectives by using an O for outstanding achievement, an S for *satisfactory achievement,* an N if improvement is needed, and a U for unsatisfactory work. This evaluation is carried on continuously during the various activities.
- B. Students keep their own records of progress in the activities.
- C. Written exercises, including tests, are used to appraise increase in understanding and skills.
- D. Data obtained in the above procedures may be used to evaluate students in relation to each other, and to assign marks when marking must be done on a comparative basis rather than on individual growth.

The various parts of the teaching-learning unit are now presented in greater detail.

INTRODUCTORY STATEMENT

The first step in planning a unit is to consider the interests and achievement levels of the students. The teacher who has taught a class for some time usually can estimate these quite accurately (Fig. 6.3). Examination of cumulative records and discussions with experienced teachers help

the beginning teacher estimate interest and achievement levels of the group for which the unit is being organized.

The length of time necessary to complete a unit must be estimated, because most classes meet for a specified number of minutes each day,

Fig. 6.3. Why might this experienced teacher require less time in planning a unit than a beginning teacher? (Milwaukee, Wisconsin, Public Schools)

hours each week, and days each month. Learning activities must be completed within these time limits. Flexibility may be provided by extending or shortening other units when teaching. Estimated time for completing a unit should be disregarded when this will facilitate learning.

In order to assure continuity of learning, the teacher must decide how the unit fits into the overall plan. Units that are well planned and exe-

cuted flow smoothly from one to the next; each builds on the preceding one and leads to the following one.

OBJECTIVES OF THE UNIT

Objectives should be socially valid, neither too difficult nor too easy for the students, and stated in sufficiently concrete terms to serve as guides for evaluation.

Social validity refers to the objectives from the standpoint of what society considers valuable and worth while. We can determine the social validity of objectives by examining the general goals of secondary education outlined in Chapter 1. If we accept these goals as valuable and worth while, our objectives must be expressed in terms of the first three words appearing in each: "All youth need . . ." Many high-school students have been eliminated because sufficient consideration has not been given to these words in formulating objectives and in actual teaching.

It is difficult to predict accurately the degree of understanding and skill that students will achieve during a given time. Furthermore, students vary widely in ability and achievement. Therefore, no unit plans should fix average level of attainment because, if rigidly followed in practice, it will eliminate the slower learners and retard the more rapid ones. Instead, objectives should be expressed in terms of the general level of performance anticipated, on the assumption that each student will progress to a higher level than he was on when the unit began.

The objectives should be stated in a form that will serve as the basis of evaluation. If understandings, skills, and attitudes are expressed in terms of student behavior, for example, the teacher can ascertain whether a certain student is achieving this kind of behavior, and the degree of achievement (Fig. 6.4). For an objective to serve this function, it should begin with a verb, the student being understood as the subject of the verb.

Sample objectives expressed as skills and attitudes and meeting all three criteria are now presented. One social skill to be developed in a unit on improving recreational facilities in the school and the community is: "The student works coöperatively with classmates." This objective needs further definition for evaluation purposes. What distinguishes the student who coöperates from the one who does not?

1. Volunteers own ideas in his group.
2. Listens attentively to others.
3. Remains calm in discussions.

4. Is courteous.

5. Secures information for his group.

6. Completes group-appointed tasks.

7. Assumes responsibility for his own contribution to the group.

8. Assumes responsibility for getting the group's work completed.

Although these eight objectives do not include all the behaviors of students who are learning to work coöperatively, they are sufficiently specific to provide a basis for teacher and students to evaluate progress.

How can a specific attitude be expressed clearly? "Prefers good music" is an attitude to be developed in a class in vocal music. What does the student do to develop a favorable attitude toward good music?

Fig. 6-4. What are the probable objectives of a unit that included such activities as these? (Evansville, Indiana, Public Schools.)

1. Participates in singing good music.

2. Memorizes words and melodies.

3. Listens attentively to records in class.

4. Criticizes records on basis of criteria for good music.

5. Listens to broadcasts of good music.

6. Attends concerts and recitals whenever possible.

7. Reads biographies of composers.

8. Buys good records.

9. Joins school music organizations.

10. Brings good music into the home and into other social groups as recreation.

These ten objectives are sufficiently clear to provide criteria for evaluation; they may not cover all you would include. You will probably agree that if desired attitudes are being formed in this music class, the students will necessarily show some of these behaviors. If none of the ten is apparent the instruction is not contributing toward developing the attitudes. The five groups of objectives at the beginning of Chapter 5 provide further illustrations of how teachers state unit objectives in various subject fields.

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Objectives which are clearly expressed indicate content. Understandings indicate the facts and information required; skills, the methodology. These two combined with attitudes may be adequate to indicate the content of a unit but usually are not sufficiently specific to permit omitting this part of the unit plan.

Content may be organized in terms of a topical outline of the subject matter, an outline of the developmental sequence of a skill, a statement of developmental problems, an outline of projects, or a combination of these. A content outline for a unit in United States history might be divided into major problems for study, with an outline of the subject matter and a breakdown of the social skills to be developed by solving the problems, or it might follow a chronological arrangement. The particular way a content guide is organized depends upon the specific outcomes sought. The degree to which specifics should be incorporated in it depends largely upon the teacher's mastery of the field. Generally, a brief statement of major emphases in the unit, with specifics covered in the daily planning, is effective. The content guide assures that major areas are not omitted and that minor aspects are not overemphasized.

The present book is divided into four major units, the first of which is "Bases of Creative Secondary Education." The chapter titles and the outline of each of the five chapters in this part constitute the major content of the part. To illustrate content outlining, we present Chapter 2 in complete outline form; only the titles of the other chapters are given.

Chapter 1. The Coal: Education of Value to Youth.
Chapter 2. Adolescents Today: Their Nature and Needs.
   A. Personality emerges with maturation.
   B. Developmental needs of adolescents can be met.
      1. Understanding and accepting own physique.
      2. Developing satisfactory relationships with agemates.
      3. Establishing more mature relationships with adults.
      4. Achieving emotional maturity.
      5. Making progress toward economic independence.
      6. Achieving intellectual maturity.
      7. Developing a philosophy of life.
   C. Methods of studying adolescents can be improved.
      1. The sociogram.
         a. Administration of the sociogram.

b. Tabulating and diagraming.

c. Interpreting sociometric data.

2. The *observational case study.*

D. Adolescent behavior can be understood better.

1. Activity is directed toward need satisfaction.

2. Adjustment problems arise when needs are *not satisfied.*

3. Adolescents attempt to solve problems intelligently.

4. All behavior results from cause-effect relationships.

Chapter 3. *Learning with Meaning and Purpose.*

Chapter 4. *Democratic Living in the School.*

Chapter 5. *Curriculum Patterns and Organization.*

UNIT ACTIVITIES

Activities in a unit are planned on the basis of the developmental sequence in an *initiatory, developmental,* and *culminating* pattern. Unit activities are treated in more detail in Chapters 7 and 8.

Initiatory activities are planned and organized so that students:

1. Focus attention on the teacher and the desired outcomes.

2. Secure an overview of the unit.

3. Discover values that they can gain.

4. Feel the need to exert themselves in carrying out individual or group activities or both.

5. Plan with the teacher procedures for particular activities.

6. Establish group and individual objectives.

During this initial period the teacher needs to learn to know each student as an individual; to study group characteristics, particularly interests, range in achievement, and different abilities; and to establish a good emotional atmosphere in the classroom.

Developmental activities follow smoothly from the initiatory and are so organized that the students continue to be interested in their work; gain a clearer perspective of goals and of methods for achieving them; and develop understandings, skills, and attitudes while *successfully* completing these activities. The teacher provides appropriately for individual differences; thus each student attains his potential in relation to the unit. Except in the case of highly unusual groups, developmental activities should be designed to provide for a wide range in final achievement; they should not force mediocrity on the superior or eliminate the slow learners.

Fig. 6-5. Much planning must be done by both teacher and students to insure success of this learning activity. (School District of Philadelphia.)

Culminating activities are designed to help students summarize their experiences, find further ways to apply their new understandings and skills, acquire favorable attitudes, and discover new goals. The culminating activity is usually planned when the unit is initiated, and the developmental activities are planned so that the culminating activity will be successful for all the students. In other words, in teaching there is no sharp break between any two of these stages; one moves smoothly into the next.

RESOURCES AND MATERIALS

Four types of materials and resources were listed in the framework for a teaching-learning unit: reading materials, audio-visual materials,

demonstration and experimentation materials, and school-community resources including personnel. The materials and resources required are determined by the learning activities, because every kind of learning activity necessitates particular materials and resources if it is to be made meaningful to the students. Sources of these should be explored in planning the unit. Securing them before starting the teaching, and discussing with the students how they can assist here is an important phase of unit planning (Fig. 6.5). Many learning activities fail to succeed because the necessary materials are not available and school and community resources are not fully utilized.

The teacher who limits unit activities to those possible with the materials available in the classroom often overlooks some that are extremely worth while. Imagination and resourcefulness in supplementing classroom materials with those available in the school and the community pay good dividends. It is generally good to plan in advance class trips into the community or into other school areas such as the library. The teacher who secures the necessary materials in advance, has students assist in obtaining other materials, and plans in detail for the effective use of all materials will be most successful in attaining his teaching objectives.

EVALUATION PROCEDURES

Evaluation procedures measure the extent to which objectives are achieved and the students derive value from the learning experiences. Evaluation is concerned with the following steps: (1) Objectives are formulated; (2) activities are organized to achieve these objectives; (3) materials and resources required to make the activities meaningful are secured; (4) student behaviors which indicate growth in understandings, skills, and attitudes are identified; (5) instruments such as written tests, informal appraisal such as ratings based on observation and conferences, and student self-appraisal are utilized to obtain data concerning student growth; (6) these data are analyzed. This analysis enables the teacher to understand the strengths and weaknesses of individual students, the extent to which the objectives have been achieved, the degree to which the various activities were effective, and the extent to which the group profited from them.

Thus, evaluation is an integral part of the teaching-learning process. In planning, evaluation begins with the teacher's attempt to identify and

express valid objectives. In teaching, it begins with his attempt to determine where students are at the present time. The primary purpose in evaluation thereafter is to facilitate learning. Evaluation of this type is sufficiently comprehensive to provide a basis for marking and reporting to parents; the latter may be on an individual or a comparative basis, whichever the specific situation demands. A more detailed treatment of evaluation procedures is presented in Chapter 9.

DAILY PLANNING IMPLEMENTS THE UNIT

After a teaching-learning unit has been organized, daily planning is still necessary, but it is now in proper focus. It is unnecessary to project a series of daily plans far into the future when a unit has already been planned. Instead, they are organized to fit into the unit; in fact, they are essential for carrying out the details of it. As shown in the accompanying framework for a daily plan, the major purposes in daily planning are to insure efficient handling of routine, to outline the day's activities, to make sure that necessary materials are ready for use, and to indicate the approximate use of time. The unit itself contains estimates of the approximate length of time necessary for the various activities. Such estimates are purposefully flexible to avoid rigidity in timing that would cut short or prolong a particular activity. Daily planning enables activities to be adjusted to the students' rates of learning and provides for the details necessary to achieve the objectives of the unit.

HANDLING ROUTINE

The particular methods of handling routine need careful attention in daily planning because many class periods begin with routine details. Most teachers are concerned with calling the roll for reporting attendance, adjusting such physical aspects of the classroom as light, ventilation, heat, and seating arrangement, securing needed materials from storage, and making announcements (Fig. 6.6). Two considerations are immediately apparent in connection with these routine details: (1) how time may be utilized most efficiently, and (2) how student participation in them may be made a worth-while learning experience. Both of these are important. When the teacher spends from three to ten minutes at the beginning of the period on routine details, adolescents do not sit quietly and do nothing; usually they talk with one another. The longer the period of inactivity, the louder and more restless they become. Many beginning

FRAMEWORK FOR A DAILY PLAN

Class .... Date ....
Major objectives for the day:

Activities in progress or problems under investigation:

Anticipated Use of Time	Activity	Teacher Participation	Student Participation
	Routine		
	Initiatory activities		
	Major activities		
	Summarizing activities		
	Planning for the next day		

Outline of materials including subject-matter understandings and related skills:

Evaluation:

teachers cannot capture the attention of the class during the entire class period because they have failed to plan carefully for routine details.

Experienced teachers allocate routine duties to various members of the class, using as many students as possible. When students know that they are responsible for these duties, they come to the classroom before the bell rings so that materials and supplies will be ready and all other details taken care of. This leaves the teacher free to greet the class pleasantly and to set the tone of interaction for the students.

GETTING STARTED

In daily planning, be specific in outlining the questions you will ask, the review of preceding activities you will give or the questions to elicit such review, the suggestions you will make, and the method for utilizing the chalkboard and other illustrative materials and supplies. One frequent student criticism of secondary-school teachers is that their questions and suggestions are not readily understandable. In framing the oral part of your daily plan, select your terminology as carefully as in writing a business letter. In getting off to a good start, present an idea, question, material, or demonstration that attracts the attention of the entire class and at the same time initiates mental activity on the part of each student.

Fig. 66. Why is daily planning essential for handling routine matters? (Manona Grove, Wisconsin, High School.)

A teacher can stimulate mental activity by calling attention to a prominent display or material; asking a "how" or "why" question that cannot be answered in one or two words; putting major ideas on the chalkboard for the students' consideration; reading a brief, very interesting report related to a class activity; or presenting a short, quick-moving summary of previous activities.

MAJOR ACTIVITIES

The methods utilized in directing major activities are aimed at assisting the students to establish clearer understandings, reach higher levels of skills, and attain desirable attitudes.
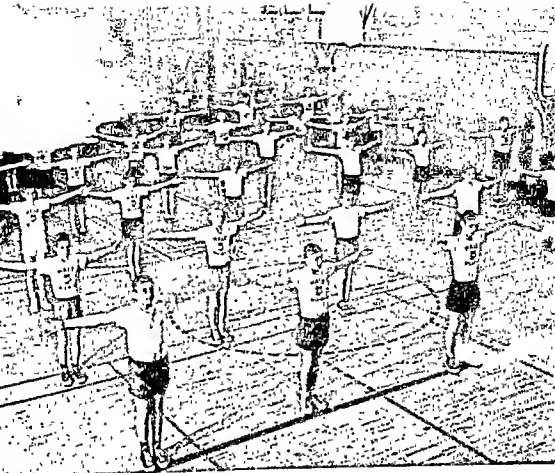
Fig. 6.7. In large groups such as this, careful planning of practice is particularly important. (West Allis, Wisconsin, Public Schools)

Outline the major activities to be undertaken by you and the class. Be specific in analyzing practice procedures (Fig. 6.7). Whether the practice is highly specific as in typing, moderately specific as in problem solving, or generalized as in group discussion, the following questions will be helpful in deciding on methods:

1. Do the students feel the need of this practice?

2. Do they have a general understanding of the whole process?

3. Is provision made for detecting and eliminating errors and poor form?

4. Do the methods, including length of the practice period, make allowance for individual differences?

5. What part of the class period can be used most efficiently for practice?

6. What student behaviors indicating fatigue or boredom will the teacher look for?

SUMMARIZING ACTIVITIES AND PLANNING FOR THE NEXT DAY

Summarizing activities and making plans for the next day become one when the daily plans are part of a cohesive unit. A summary for today should lead into what will be accomplished tomorrow. Each student needs to know what comes next, why it is to be done, and what he can do in preparation for it. For many years this has been called the assignment. Assignments as usually interpreted mean teacher-stated directions. Furthermore, because the assignment must be clear, specific, and easily understood, teachers are prone to give hasty assignments such as the following: "Each of you do the odd-numbered problems in your text, pages 67 to 68, and hand them in at the beginning of class tomorrow." "Tomorrow we will discuss civil service in our state, so read pages 138 to 150 in your textbook, which outlines our system." "Tomorrow we will review for the monthly test. Each of you bring to class twelve questions, two from each of the six chapters we have now finished. Make these questions the kind that can be answered in one or two words."

Three generalizations to guide planning for subsequent days may be stated as follows: (1) When students share in planning their activities, they put forth greater effort in carrying out these plans. (2) The same assignment for all the class is usually too difficult for the poor students and too easy for the better ones. (3) Each student needs to know what comes next and how it is to be done. Regardless of the additional time involved, careful consideration of the part both teacher and students will take in subsequent planning pays large dividends.

MATERIALS OUTLINE

In all teaching fields, having materials and supplies available and ready for use is an important part of daily planning. Many teacher demonstrations lose their effectiveness because at a crucial moment, when interest should be at its peak, some material is missing. Securing it diverts the students' attention from the demonstration. Science teachers are generally agreed that every classroom demonstration should be done previously by the teacher and that the teacher's comments during the demonstration should be carefully outlined. This holds for all other types

of demonstrations. Sound films, radio programs, and television hold our attention because of the great amount of skilled effort that has been put into planning the programs.

Subject matter should also be outlined. The outline should include the important concepts and skills in the form and sequence in which they will be studied by the students. That is, the ideas should be arranged in the order most meaningful to the pupils, and should be expressed in carefully chosen terms that the students will understand. It is usually better, in selecting terminology, to have the poorer group of students in mind, so that everyone in the class will understand what is being said. Whenever new terms are a necessary part in developing understandings and skills, the students should have been given the opportunity to examine them before the teacher uses them as part of the new subject matter.

Fig. 6.8. How does planning for the use of time affect student and teacher activity in the classroom? (Pittsburgh, Pennsylvania, Public Schools.)

TIMING THE DAILY PLAN

When the daily plan is part of the larger unit, greater flexibility in using time is possible, for the bell that ends a particular period does not halt the learning experience. But when the daily plan is to present a complete learning experience in itself, planning the use of time is extremely difficult. The more interest students show in activities, the harder this aspect of planning becomes. Even experienced teachers find it extremely difficult to achieve perfect timing; many use the latter part of a period for individualized instruction, a summary of the day's work, or preparation for the next day's activities.

Turn back to the framework for a daily plan, and note that space is allotted for anticipated use of time. This is not intended to set inflexible time barriers but rather to indicate, in preplanning, how much of the period will be used by the teacher and how much by the students. In filling in the proposed time, activity, and the teacher-student participation, add up the time you have allotted yourself for explaining, lecturing, reading, asking questions, or demonstrating and the time the students lead in various activities. For example, if you plan to lecture for forty minutes, put "lecture" in under teacher participation and "listen" or "take notes" under student participation. Do this for all the day's activities, routine and otherwise, and be sure to include what the students do. It often happens that when experienced teachers check anticipated and actual use of time, they find that they were much more active over a longer period of the day than they had planned (Fig. 6.8).

EVALUATION

When planning a unit, a method whereby students can measure their own progress may have been outlined briefly. The method is treated in detail in daily planning. The unit may include a multiple-choice test to appraise the acquisition of understandings. The daily planning is concerned with specific instructions for administering the test, including distributing copies of it, directions for answering questions, the extent to which students will be helped, the time allowed for completion after the first student finishes, method of scoring when students assist in it, and returning the tests and answer sheets.

One frequently overlooked phase of evaluation in daily planning is an analysis of the strengths and weaknesses of the day's teaching. Teachers often do this mentally but make no written comments. This means that many effective teaching procedures are unrecorded and poor practices are repeated. Keeping a log of daily evaluations is profitable for the beginning teacher. A loose-leaf notebook which contains daily lesson plans and provides space for making daily evaluations is excellent for this purpose. Such evaluations also provide a cumulative record of the progress of the unit.

At this point you are probably wondering how you can plan for a semester, then for several units during a semester, and finally draw up a series of daily plans. One approach is to set up your overall plan first;

then outline a unit or two before you start to teach; and finally, organize the lesson plans for the first day. Make subsequent unit and daily plans as you proceed. The job is time-consuming but extremely worth while. Once you have planned a group of units, discovered student activities, and know the teaching procedures that are best for you, you will have time to supplement the units and experiment with new methods.

SUMMARY

Preplanning is necessary to guide both teacher and students in beginning learning activities and completing them successfully. In a teaching-learning unit, objectives are expressed as the understandings, skills, and attitudes to be acquired by the students. Sequential activities, calling for student and teacher participation, are outlined in a framework of initiatory, developmental, and culminating activities. The materials required for these activities are located, and plans are made for their use and for direction of student activities. Procedures are outlined for appraising the extent to which the objectives are achieved.

Daily planning incorporates the specific details required for the units. Its major purposes are to assure that the classroom is managed well, to outline specific methods for the day's activities, to insure that needed materials are available and ready for use, and to utilize time efficiently.

Questions and Activities

1. What are the major characteristics of a resource unit? Organize such a unit in coöperation with one or two other persons.
2. What are the main characteristics of a teaching-learning unit? Organize one related to your area of subject-matter interest.
3. What class activities should students share in planning? Why?
4. List the major understandings, skills, and attitudes which you have developed thus far in studying this book. What activities have you engaged in to achieve them?
5. What are the major purposes of initiatory, developmental, and culminating activities?
6. List the materials and resources needed to make learning activities meaningful at a grade level related to your subject interest.
7. How is evaluation related to teaching? What are the major reasons for outlining evaluation procedures while planning a unit?

8. How does daily planning differ from planning a teaching-learning unit?
9. Draw up a lesson plan for the first day you meet a given class.
10. Outline the procedures which you advocate for handling routine details.
11. What kind of records of their day-to-day progress in conducting learning activities might teachers keep?
12. Describe a teaching situation in which you think it is wise for the teacher to have no written plans, or a class you attended for which the instructor apparently did little or no planning.

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▌HAVE a large coil which, as you can see, is insulated wire, wound together. I'm going to connect the two ends of the coil to this current-measuring instrument called a galvanometer. Here's the friend we've already studied, a bar magnet. Watch what happens to the needle of the galvanometer when I push the north pole of the magnet inside the coil of wire. (Needle moves to the left.) Now watch when I pull the magnet out this way. (Needle moves to the right.) Now I'm going to go through the same operations once more. Tell me, why did the galvanometer react the way it did?"

Thus was begun a unit on electrical current in an eighth-grade general science class; this was the second unit on electricity.

"Let's take a look at the major piece of equipment in our classroom—a sewing machine. I'm going to open it now. Gather round so that you can all see."

This was the introduction to a unit on sewing in a seventh-grade arts class required of both boys and girls. After the demonstration, the teacher led a class discussion and helped each student decide what garment he would make. (Boys usually chose a sport shirt; girls, a blouse or a cotton dress.)

"Today we want to start our study of the Hebrew people. You probably know something about the Hebrew people from the Bible, your friends, and reading. We want to learn how these people influenced western civilization and what their present problems are in Israel. Let's examine some scenes (displays large colored pictures) which show old-time and present Hebrew life. Afterwards we'll decide the main questions we want to answer."

These were the opening activities in a tenth-grade world history class, second unit.

"Bonjour, mes amies."
"Bonjour, mademoiselle."
"Comment allez-vous?"

"Je vais très bien, merci."

"Quelle est la date aujourd'hui?" (Addressed to one student.)

"C'est aujourd'hui lundi le vingt-cinq octobre."

This is the usual manner of starting a beginning French class in the sixth week, noting the social amenities and conversing in French.

"Put your scratch paper away now. We need to get out some more letters and reports today."

This is an advanced office practice class for seniors, in which the students come to the classroom, obtain materials, prepare their typewriters, warm up, and practice speed exercises until the teacher tells them to stop. He then outlines the day's activities with the class.

The above examples illustrate several useful principles for initiating unit and daily activities. The first of the five that follow is particularly well illustrated.

1. Student attention is focused on the teacher and the proposed learning outcomes.

2. Individual and group goals are clarified.

3. Procedures for subsequent activities are organized.

4. The teacher becomes acquainted with the characteristics of the various students.

5. A favorable emotional atmosphere is established.

The second and third principles are most effective when coöperative student-teacher planning is used; the other three require positive teacher leadership.

Numerous examples of the principles are given in the rest of the chapter. We shall follow a Miss Nelson who might be teaching a tenth-grade English class in almost any senior high school during the first two weeks of the school term.[1]

STUDENT ATTENTION IS FOCUSED ON THE TEACHER AND THE PROPOSED LEARNING OUTCOMES

Examining the process by which mental activity is stimulated reveals that as more sensory perceptions are involved, the greater is the likeli-

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[1] The author is indebted to Miss Elizabeth Carney, Supervisor of English Teaching in the Laboratory School of the Colorado State College of Education, for critical examination of the unit in tenth-grade English.

Fig. 7.1. Are conditions such as these favorable or unfavorable for attracting and holding the attention of students? (Chicago, Illinois, Public Schools.)

hood of attracting and holding the attention of the class (Fig. 7.1). Furthermore, if attention is to be attracted in a definite direction by presenting certain stimuli, competing stimuli are eliminated. The physical arrangement of the classroom can be planned so that stimuli related to the work will be presented and competing stimuli eliminated.

The twenty-five students who enter Miss Nelson's tenth-grade English classroom for the first time see a large bulletin board containing well-displayed student-made cartoons, magazine clippings, and book covers under the caption: "Let's Get Acquainted." The well-groomed, friendly adult near the entrance greets them pleasantly. A bell rings signifying that the class has begun.

The students' seats are arranged in a large circle; Miss Nelson's chair is part of the circle but is set back slightly to give her freedom in using the chalkboard and other materials. Her desk is in one corner. This circular seating arrangement enables Miss Nelson to see each student; each student sees Miss Nelson and also every other student. When she or a student is talking, everyone in the circle can direct his attention to the speaker with the minimum amount of inconvenience; in fact, he cannot avoid it graciously. Moreover, Miss Nelson can see not only the movements of each student's head but also their arm and leg movements. These movements are likewise visible to everyone in the class.

This seating arrangement eliminates many competing stimuli which are present when seats are arranged in rows or the class sits around a table; it tends to put each student on his best behavior; and it directs his attention toward the teacher. Whatever the usual arrangement of seats in a particular room, for initiatory activities involving teacher-led discussion or demonstration it is wise to arrange them so that there is maximum opportunity for students to focus attention on the teacher and little opportunity for them to become engrossed in one another.

What is the next step in providing further impetus for focusing attention?

After each pupil has introduced himself and taken a seat, Miss Nelson says that in this class the students will learn to express their ideas more accurately both orally and in writing. She mentions a recording made by a previous class which told how they had gone about their work and summarized what they had done during the semester. She asks the new class to listen to it, to see if they recognize any of their friends. While the record is being played, the students realize that the other class worked on problems and projects dealing with making friends, improving reading skills and using the library, holding small-group discussions, speaking individually, and writing. In the few minutes of the period that remain after the record is finished, Miss Nelson leads a class discussion about it.

Many activities may be used to good advantage to focus attention on the teacher and on the proposed outcomes of instruction. Here are four which indicate the variety.

In science classes, demonstrating an experiment which makes use of materials in the students' environment captures their attention. For example, chemical and filtration methods for purifying water may be demonstrated; the breaking down of water into its elements is also fascinating to most students.

In typing and other skills classes, having a classroom demonstration by four or five student typists who have developed a relatively high level of skill and good typing form gains and holds attention. The teacher interrupts them freely while they are typing to ask them about their methods and to point out good form and correct procedures.

One initiatory activity which proved successful in a geometry class was to have former students come to this class with objects involving geometry which they had produced—household decorations involving geometric designs on paper and cloth, a projection of the front view of a home, a model playground. The students explained how they had made these objects; other students discussed briefly and informally the reasons they were continuing their study of mathematics.

In introducing equations in algebra, the teacher brought a balance and blocks to class to acquaint the students with the concept of equations. He used the blocks and scale to demonstrate that equal numbers of blocks must be added to or removed from both sides of the balance to maintain equality.

Initiatory activities like these appeal to both vision and hearing, utilize materials and resources which are both concrete and familiar, are sufficiently simple, and are presented in such context that they are meaningful (Fig. 7.2). Their attention thus aroused, the students are ready to examine and define the objectives that will be pursued.

INDIVIDUAL AND GROUP GOALS ARE CLARIFIED

In preplanning, as was said earlier, the teacher identified and expressed the objectives that were socially valid and were suited to the developmental levels of the students. The statement of proposed objectives included the understandings, skills, and attitudes to be developed by the students and indicated the kinds of activities required. At this point in initiating a unit of work the teacher needs to examine his own objectives in relation to his students' goals. It is his responsibility to assist students to identify the learning goals they are already conscious of, and also others which they may not yet have become aware of. To set goals, the students must discover values which may accrue from the activities and be given an overview of the unit.

What methods are successful in this phase of the task? One initiatory activity is teacher-led informal discussion based on a question put before the class. The results of such a discussion depend largely upon how much *information* the class already has about the unit, their attitudes toward

Fig. 7.2. Many elements here will initiate meaningful learning. (Los Angeles, California, City Board of Education.)
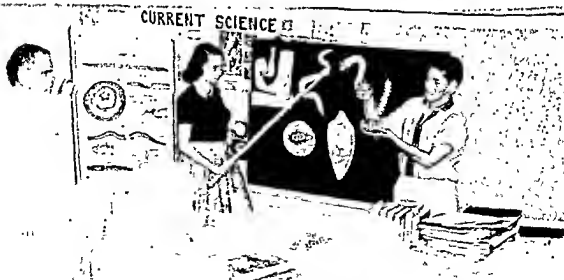
previous units in the same field, their past experiences in discussing their ideas with teachers, and the emotional atmosphere already established in the classroom. The informal nature of the discussion and the fact that every member of the class has an opportunity for expressing his ideas should lead to frank statements about goals, including those proposed by the teacher.

Miss Nelson, seated in the circle with her students, introduced the subject of goals at the second meeting of her class in this manner: "Yesterday we heard a recording made by some tenth-grade English students. These students described the interesting things they did in this course the first semester and also told us how they had gone about their work. You recognized the voices of some of your friends.

"In the few minutes left after the record ended, we became better acquainted, and I was pleased to note that you had many questions about how these students started their work and how they could make such a good recording. I want to begin our work today by giving you a problem to solve. Every boy and girl in this school and in most others in the state takes English in the tenth grade. Why do you suppose English is required in this grade? What is to be gained from taking it?"

Some of the students' suggestions follow:

1. To learn to know my classmates.
2. To learn how to make friends.
3. To get along better in other subjects.
4. To learn how to give reports without being embarrassed.
5. To learn to follow written directions.
6. To learn to talk to others without becoming angry or upset.
7. To learn to write correctly.
8. To get the English I need to go to the university.
9. To learn to read my textbooks better.
10. To learn to read faster.
11. To learn punctuation and spelling to become a stenographer.
12. To learn the spelling and writing I need to become a railway clerk.

Before the suggestions were made, Miss Nelson asked a student to list them on the board so that they would be readily available for further discussion. After all suggestions were in and had been discussed, she introduced others for consideration.

Her next step was to help the class analyze these suggestions in more detail in the form of goals. Miss Nelson herself grouped them into four

major categories: making and getting along with friends, reading, speaking, and writing. She chose not to take advantage of this excellent opportunity to help students start to develop ability in systematizing their study, because her preplan called for four units and she wanted to make sure that the objectives were grouped according to this pattern so that the major emphasis in each unit would be given to a specific area of understandings and skills.

After this analysis had been completed, she gave the class an assignment: "We now have on the board a list which includes all our suggestions. Each of you will please pick out those which you think are most important and write them on a piece of paper. Hand it in after you have finished. I will return it tomorrow so that you may keep it in your notebook. We shall refer to your lists tomorrow when we decide more definitely what we are going to do for the next few weeks."

A second method for helping students clarify goals is to use written or oral anecdotes that show how people use understandings and skills in their daily activities. After the anecdotes have been presented, the teacher must make sure that the students identify and accept the implied goals as their own. This may be done by means of an assignment, to be completed outside the class, asking the students to find out from friends and parents what they have gained from studying English. These reports serve as the basis for a class discussion which may at first involve the entire class; later in the period smaller groups may be formed on the basis of interest or friendship.

A third method of identifying goals is to construct and administer a questionnaire or check list, each item of which concerns an objective of the unit. The following sample questionnaire items, for example, are to be marked "Often," "Sometimes," or "Never":

1. When you are explaining something to your classmates, do they understand what you are saying?
2. Do you have difficulty in following written directions?
3. Do you like to go before your classmates and tell them about something interesting, such as a film you saw?
4. Do you sit quietly and listen carefully, without interrupting, when a classmate presents an idea you disagree with?
5. Do you read newspapers, magazines, and books in the school library?
6. Do the papers your teacher returns have many errors in spelling and punctuation?

7. Do you use any library other than the one at school?
8. Are you embarrassed because you can't find the "right" thing to say in class?
9. Do you talk easily with your friends outside class?

A check list in which each student checks the items in which he thinks he needs most help may include:

1. Reading more rapidly.
2. Following written directions more accurately.
3. Using the library to find information and interesting reading material.
4. Writing papers more accurately.
5. Making fewer errors in spelling.
6. Using words to express ideas more clearly.
7. Talking to the class.
8. Discussing differences of opinion with classmates without getting angry.

In another method, teacher-made or standardized diagnostic tests are used. The teacher makes sure that the students understand that their test scores will have no influence on their marks for the course. The test should be followed by a teacher-led discussion of the results so that the students will interpret them correctly. Test results may be used in directing attention to the setting of realistic goals. So that every student will derive the maximum benefit from the test, a discussion of ideas and more specific outcomes is valuable.

These methods of assisting students to identify and clarify goals are applicable in many teaching situations. When most of the students in a class are generally interested in school work and particularly interested in a certain course, these procedures usually create interest in the few who do not take their work very seriously.

This setting of goals at the beginning of a course or unit is not sufficiently specific to serve as the basis for student self-evaluation. This usually comes later, when work directed more definitely toward achieving the goals is under way. Moreover, goals are often not clear or realistic to some of the pupils early in a course.

In classes where projects are the major activities, as in home economics, shop, agriculture, and art, and in classes where skill is readily measured, as in typing, shorthand, and to a lesser degree music, helping each student to establish realistic goals is easier than in some other courses (Fig. 7.3). In a beginning typing class, for example, an immediate goal is to learn the keyboard in six weeks, a less immediate goal is to type

twenty words per minute within four months, and a remote goal is to type forty-five words per minute at the end of the year—well enough to work as a typist during the summer vacation. To assist his students in formulating individual goals the teacher may type at various speeds, discuss other students' progress at different intervals, and have the class investigate employers' requirements for typists.

As courses in English, social studies, mathematics, and foreign languages are frequently set up, formulating individual goals is difficult for students. The most ineffective procedure is for the teacher to set the same goal for all his students by having them read a certain number of pages or solve a certain number of problems. Another ineffective procedure is for the teacher to do all the evaluating and mark each student on the basis of comparative achievement. Both of these procedures are ineffective because the goals —reading a certain number of pages and working for a high mark—are too artificial for many students and hence are not accepted. However, some students in almost every class will accept either or both goals. Students of high ability whose parents consider going to college of great social value or whose parents reward their children for high marks, consistent effort, and good conduct are perfectly willing to read a certain number of pages and to work hard for good marks. However, most students will accept these goals when their teacher helps them to discover that doing so will enable them to solve

Fig 7.3. Certain areas of instruction are more appropriate than others for the setting of individual and group goals. What effect do clearly established goals have on student effort and conduct? (Top, West Allis, Wisconsin, Public Schools; lower, Erie, Pennsylvania, Public Schools.)

a larger problem, to complete a project, to understand a process, to develop a skill, or to secure social approval.

PROCEDURES FOR SUBSEQUENT ACTIVITIES ARE ORGANIZED

The developmental and culminating activities outlined in preplanning must now be considered in relation to events taking place thus far in initiating the unit. The teacher's major responsibility here is to help his students analyze these activities and work out procedures for completing them.

Methods similar to those presented in connection with teacher-student consideration of goals may be used in planning activities coöperatively. It is at this stage in initiating a unit that definite plans are made for getting started and for completing the work. If the major goal is to develop skill in writing shorthand or playing a musical instrument, the teacher and students will spend relatively little time in discussing group activities. If the goal is to survey community resources in connection with the use of leisure time, a considerable amount of teacher-student planning is necessary to make the work meaningful and worth while.

One method of planning procedures is to give the students a fairly complete outline of activities and procedures, with specific directions and specific times allotted for completing various parts. In presenting this outline, the teacher explains how the unit is organized and discusses the procedures and activities contained in the outline. After this, it is advisable to give the students a chance to suggest procedures and activities. If better suggestions are made, they should be incorporated in the outline. It is imperative that the students examine the outline carefully so that they will know how to proceed and will accept the outline as their guide. The carefully planned outline has the virtue of making things concrete; however, some students will not accept the assignments in it as worth while.

A second method of planning activities is to state a problem and then ask students for methods for solutions. Most of the students in Mr. Young's class in general science came from an irrigated farm region. In discussing various problems of conservation of resources with the class, Mr. Young found that the students were aware of and interested in water supply, the erosion of soil by wind, and effects of temperature

variations. This led to a more general discussion of how climate affects our daily living. In directing the discussion, Mr. Young took his cues from the steps in scientific problem solving:

1. What is the problem? This involves such questions as: What do we mean by climate? How do amount of rainfall, direction of wind, and temperature affect what we do and how we live?

2. What do we know about this problem already?

3. What kinds of additional information do we need and where can we find it? Here Mr. Young suggested the use of textbook and reference materials, experiments and demonstrations, newspaper reports, and weather bureau information.

4. How can this information be recorded so that we can analyze it? Specific procedures for making charts, graphs, weather map, etc., were introduced at this point.

5. What types of conclusions are we looking for? This question led to discussion of the scope of the problem. Mr. Young considered it his responsibility to see that it included the effect of climate on farming, type of clothing and housing, cost of fuel, source of the water supply, recreation, and vitality.

6. How can we test our conclusions? Mr. Young's students suggested that it would be necessary to compare our living conditions and climate with those of some other region. The students who had lived in other parts of the country volunteered to get information about those regions.

7. How can we apply our conclusions? Mr. Young led his students to find applications by asking the question: How can we control climate, or manage our living conditions to capitalize on the climate to a higher degree?

A third method of planning activities is to outline the broad aspects either of a project in which the whole class participates or of a number of projects to be carried out by committees. On the third day of class, Miss Nelson introduced planning in this way: "Yesterday we discussed some of the things to be gained from studying English. We decided that since we were new at school, we should begin by studying how to make friends and get along better with people. Some of you were concerned about learning to know your classmates; four of the girls said they were mainly interested in learning how to refuse dates without offending the boys. Others wanted to know how to make introductions properly; two

students told me after class that they had trouble in getting a conversation started when parents or teachers were in the group. Two or three students said that they frequently get into trouble at home about using the phone. Here we have a whole group of problems which deal with ability to say the right things well at the proper time. Other tenth-graders have many of these same problems, so we are going to do something about helping ourselves and others.

"After class, I saw the principal and he invited us to present a program at the next assembly on October 13—four weeks from now. How can we arrange a program that will help other boys and girls get acquainted and learn to get along better with one another?"

Students volunteered ideas and Miss Nelson made recommendations. As a result, the class was divided into five committees on the basis of interest.

The telephone committee decided to find out recommended procedures for using a telephone and to list them. The chairman of this committee was to act as master of ceremonies for the assembly.

The introductions committee was to find out proper procedures for making introductions, to dramatize their findings, to greet all the students who came to the assembly, and to distribute a mimeographed sheet, "Tips for Making Friends," at the assembly.

The dating committee was to dramatize correct procedures in asking for a date, accepting an invitation, refusing graciously, and arranging finances and time with parents. This committee's work was also to include getting seats at a movie, exchanging dances, and acting properly when dating.

The conversation committee was to discover how to start a conversation and to determine the characteristics of a good listener and a good conversation leader. Its findings were to be dramatized for the assembly, and recommended procedures presented in written form.

The cartoon committee was to show in cartoons some of the most important problems being worked on by the other committees and to display and discuss these cartoons in the assembly.

Getting information was the first problem for all the groups. Miss Nelson pointed out chapters in the textbook which dealt with making friends, writing, and speaking, and also recommended books and articles in the library. After the committees were formed and had begun to make plans,

Fig. 7.4. What procedures are necessary to secure this type of conduct in small-committee research and discussion? (Top, Cincinnati, Ohio, Public Schools; lower, New York City Board of Education.)

the whole class went to the library to find the appropriate reading materials.

When the students returned from the library, Miss Nelson found that they were extremely noisy. She thereupon introduced a discussion in which she asked the students to make suggestions on how to act in committee meetings, in the classroom, and elsewhere (Fig. 7.4). The sug-

gestions were put on the chalkboard and each student copied the list. It was decided that each chairman would assume responsibility for his committee's actions, and a short period was set aside for further discussion of this problem the next week.

In examining the teaching-learning situatim thus far in Miss Nelson's class, we find that the major emphasis is on making friends; however, the students are also going to develop skill in reading, speaking, writing, using the library, and conducting themselves in an orderly manner. Miss Nelson knew that beginning the course in this manner was a good way to help make students aware of their need for more formal study of written and oral expression, which will come in later units. Furthermore, it accomplished her purpose—teaching English as a tool for speaking, listening, writing, and living more effectively with one another.

THE TEACHER BECOMES ACQUAINTED WITH THE STUDENTS' CHARACTERISTICS

"Before the homeroom period in the morning, during my shop classes, between classes, while eating lunch, during the activity period, and after school are all excellent times to say a few words to several different individuals or to concentrate on one or two.

"As often as possible, I have my shop open after school so that interested students can come in to work on their projects, thus giving me a chance to counsel an individual pupil or to confer with groups. In this way I learn to know each student fairly well after a while, and also the boys who gang together. In addition, the after-school work permits me to demonstrate shop operations that are too complicated for students with less than average ability."

"As a teacher with over 180 different junior-high school students, I rely heavily upon the homeroom teacher's observations, on written comments, and other information from each student's personal folder to become familiar with each student's needs. Test records and class records are also helpful here."

The first teacher has small shop classes in multiple periods in a technical high school in a large city. He becomes acquainted with the characteristics of his students quite early in the school year.

The second teacher has other duties besides teaching five classes in a large junior high school. Like most teachers with many large classes he finds difficulty in becoming acquainted with his students early in the school year. Consequently he must rely more heavily on records.

A combination of observing and talking with students and using cumulative records is useful. In addition, good schools are increasingly holding preschool workshops in which each teacher finds out which students he will have and also has cumulative records available. Some schools have these workshops before the spring term ends.

We now examine some particularly valuable methods of becoming familiar with both individual and group characteristics.

USING CUMULATIVE RECORDS

Most modern secondary schools have organized a system of cumulative records which gives teachers important information regarding the characteristics of all the students. These records enable a teacher to identify quickly the following students: (1) high and low achievers, on the basis of marks given by previous teacher, (2) high and low achievers on the basis of achievement test scores, (3) students with low and high IQ, (4) students whose marks are high or low in relation to their IQ score, (5) students with sensory defects or unusual physical characteristics, and (6) those with a record of poor attendance. Most classes have a few students who rank low in all these areas; others rank very high. One or two will have an auditory or visual defect, and some will have a poor attendance record. Students in all these groups should be given attention first. The high achievers need work that challenges their abilities; the low achievers in most classes need easier reading material and different types of activities. Auditory and visual defects are taken into consideration in assigning students to seats. The teacher attempts to find the causes of poor attendance and makes a greater effort to interest such students in the school work. The remainder of the group, who are neither high nor low, who have a good attendance record and no observable health or physical handicap, are usually given more intensive study later.

Data from the cumulative record indicate past performance, which is of great importance in determining present readiness. Previous marks and test scores are quite reliable indicators of what may be anticipated in the

future. However, they should be supplemented by informal evaluations by the teacher.

EVALUATING SOCIAL-EMOTIONAL CONTROL

Less tangible qualities such as social and emotional control and work habits are also important in coming to know students as individuals. Furthermore, cumulative records do not always provide complete information, because increasing numbers of students transfer from one school to another.

One method for securing important information concerning students' emotional and social control is to construct a rating scale containing key items, with space for anecdotal records. The behavior of the students during initiatory activities is noted and recorded. A mimeographed rating sheet for each student is sufficient.

Here are questions which may be used to rate emotional and social control and to identify significant behavior. You may wish to change some of the questions or to add others.

SOCIAL-EMOTIONAL CONTROL

1. How does the student respond when he seeks attention but does not receive it?
2. How does he react when his classmates disagree with him?
3. How well does he control his own behavior?
4. How does the student react to his classmates?
5. How do other students react to him?
6. How much constructive control does he have over the others?
7. How much constructive control does the teacher need to exert over him?

It is while the students are at work that their behavior is appraised by the teacher; it is recorded either then or after class. With only slight modification, the questions may be used for the students themselves to do the rating. Fig. 7.5 shows ratings of six students on questions 5 and 6.

EVALUATING WORK METHODS

An informal appraisal to discover students with ineffective work methods may be made by observing student activities and answering these questions:

1. Does he pay attention to suggestions stated by the teacher or the group?
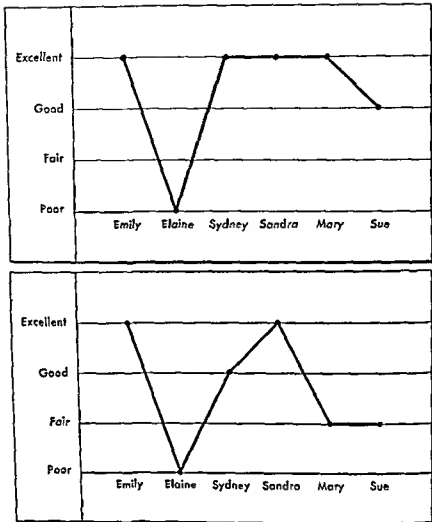
Fig. 7.5. Rating of social-emotional control of six students during a two-week period. The top curve shows the responses to the question, "How do other students react to her?" The lower curve shows the responses to "How much constructive control does the student exercise over other students?"

2. Does he have the necessary materials ready?

3. Does he start work immediately?

4. How long does he concentrate on it?

5. Does he complete the task, or start many things and leave several unfinished?

6. Does he know how to attack the particular work?

The purpose of this informal appraisal is to help students improve *so* that they will not lose interest in their work or get far behind their classmates (Fig. 7.6). The students who are socially or emotionally im-

mature frequently also have poor work habits, because they are more concerned with their immaturity than with classroom work.

All the information that enables a teacher to know the student as an individual should be gathered in order to discover how instruction may be organized to be more valuable to him. Such information has often been gathered and analyzed and the student put into a certain category, with nothing further being done to help him in any way. It is probably better not to spend time on securing information when no follow-through in work activities or materials of instruction can be made on the basis of the findings.

ASCERTAINING GROUP CHARACTERISTICS

As was said in Chapter 2, the best way to discover the direction and intensity of feelings within a group—one whose members have had a chance to become acquainted with one another—is to administer a sociometric test. Such a test readily identifies the leaders—students who are chosen frequently by others; the cliques—students who choose one another but make no choices outside their own small group; and isolates—students who choose rarely or never chosen.

Fig. 7.6. Informal appraisal early in the semester or term is essential for getting information about students' work methods. (Pinellas County, Florida, Schools.)

Any teacher working with a new class should use already-established leaders to get the class moving in the desired direction; their coöperation is extremely important, for students follow their own leaders. When committees are organized and the teacher appoints the chairmen, the students he selects should be popular among their classmates. When students select their committee chairmen themselves, they usually select the established leaders. The teacher may feel that it is unfair to focus attention on a few popular students in order to secure their coöperation, and over a long period of time this procedure is ineffective because he wants none of the students to feel isolated. But when starting a unit of work with students who are relatively unknown to him but who know one another well, the best method to insure that the whole class will go in the desired direction is to secure the leaders' coöperation.

What to do about cliques, whether to allow them to sit and work together or to separate them, the teacher can decide only after he finds out what holds the members together. When the factors are undesirable —dressing peculiarly or lavishly, avoiding school work, resisting the teacher's suggestions, or showing any antisocial behavior—two approaches are possible. The teacher may either keep the members of the clique together and try to change their attitudes and behavior as a group, or place the individual members in different groups in the hope that their classmates may influence them desirably. Which to do depends largely on the intensity of feeling among the members and the teacher's ability to interest them in a class activity to the point that the activity secures more attention than a member of the clique does. Generally it is unwise to break up a closely knit clique before establishing desirable attitudes or interesting them in activities.

Isolates need particular attention, especially when the isolation becomes a barrier to learning. Mary, who is chosen infrequently, sometimes never, does relatively well in chorus. Susan, who is aware that she is not accepted, becomes emotionally disturbed and achieves nowhere near what she could do; she daydreams instead of singing or listening. Of the two, Susan needs help first. Whenever any learning situation has as its objective assisting all the students to develop social skill in organizing and carrying out an activity coöperatively, all the isolates need special attention. As a rule, they can be brought into the group most easily if the teacher can discover some interest or skill of theirs that has prestige value to the other students. Thus, Susan is not liked because she seems unfriendly to everyone and is withdrawn from the class activities; but when the teacher discovers that she can sing quite well and asks her to sing a particular selection in class, the students may ask her to take part in an operetta. Frequently a shy but not rejected student is placed near another student who is very popular as a means of drawing him into the group. Eventually, however, some isolates must be helped to remove the causes of their isolation; but when group prejudice is responsible, the group must be helped to overcome this prejudice.

A FAVORABLE EMOTIONAL ATMOSPHERE IS ESTABLISHED

Building desirable student attitudes toward learning requires that pleasant rather than unpleasant feelings accompany the learning activities. Enthusiasm, pleasantness, and freedom from disruptive tensions are

Fig. 7.7. What emotional atmosphere and personality characteristics of the teacher are apparent in these activities? (Top, Hillsborough County, Florida, Public Schools; lower, School District of the City of Berkley, Michigan.)

obviously more to be sought than anger, fear, boredom, and the like. Student attitudes can be controlled to a high degree. Personal characteristics of the teacher and the procedures he uses in helping the class formulate standards of conduct largely determine the emotional atmosphere of the classroom (Fig. 7.7). We shall examine these two factors in relation to the emotional atmosphere of the classroom.

The personal characteristics of the teacher, such as appearance, vitality, enthusiasm, sociability, use of English, attitude toward others, and the expression of his own emotions, are frequently grouped together under teaching personality. Three factors that influence teaching personality—enthusiasm, courtesy, and fear—will be discussed and their importance during the initial phases of teaching will be briefly indicated.

Enthusiasm is contagious to about the same degree that depression is. Compare your reactions to an instructor who is very enthusiastic about teaching with your reactions to one who is extremely bored or dissatisfied with what he is doing.

Enthusiasm for student affairs is as important as enthusiasm for the subject matter, especially in initiating a unit or course. Unfavorable attitudes toward the sometimes erratic but normal behavior of adolescents often give rise to anything but enthusiasm. The teacher who is bored with a particular teaching assignment will generate little interest in his students for it. The teacher to whom a teaching assignment is a challenge will find sixty hours of interesting work each week less destructive to his mental health than forty hours of drudgery. His own enthusiasm generates greater effort and increased enthusiasm in the class.

Courtesy is often forgotten in the classroom, especially when the teacher has to deal with several large groups of students. When parents meet Miss Carr at a PTA meeting, they wonder why their daughter Julia does not like to attend this charming and gracious young woman's class. Julia says she likes shorthand, but Miss Carr makes her so angry that she cannot learn. Miss Carr often makes such statements as: "Julia, you are a sloppy girl. Just look at this messy paper"; "If you concentrated more on shorthand and less on boys, you'd be a good student"; "Look at Mary's work—it shows a neat personality." Miss Carr also asks students to run errands for her and does not thank them, and she has them correct papers without giving them adequate instructions and then "bawls them out" because they make mistakes in scoring.

Being courteous to students means holding to standards of gracious conduct. Using sarcasm, treating adolescents like small children, and criticizing them before the whole class are types of discourtesy which these young people resent. Such tactics breed anger, resentment, and

disrespect, which are damaging to a good classroom atmosphere. Conversely, treating students graciously and courteously leads them to identify with and imitate the teacher.

Showing any fear of a classroom situation tends to destroy an effective learning environment. Frequently teachers vent their anger on students and threaten punishment to alleviate their own feelings of insecurity. The best way to overcome insecurity is to develop skill in meeting a situation. Here are some ways a teacher with insecurity feelings can prepare to meet a new class: (1) Plan carefully what will be done. (2) Know the plan so well that reference to it is unnecessary in the classroom. (3) Stand still when making the opening presentation (preferably behind a desk if the teacher doesn't know what to do with his hands). (4) Speak more slowly and enunciate words more clearly than usual. (5) Allot only a very short time to the initial presentation. (6) Make assignments to the students clear and definite. (7) Have them start work quickly. Practicing in front of a mirror may prove helpful, as may recording an oral presentation.

CLASSROOM CONTROL

As we have seen, adolescents seek the approval of both agemates and adults. They attempt to satisfy their needs in socially approved ways and want to be independent of authoritarian adult control. In line with these tendencies, procedures are set up whereby they formulate their own standards of conduct and evaluate their actions in terms of these standards. Whole-class participation in formulating rules for behavior is effective because the group exercises a desirable influence over nonconforming members. Most authorities, however, recommend that student groups, such as classroom committees and student government bodies, should not use punishment in enforcing rules.

Because the method Miss Nelson used in initiating the unit on making friends illustrates how a plan may be begun, we shall review it. We recall that, after the students returned from the library, they were very noisy. Miss Nelson called the class's attention to the noise and asked them to make suggestions on how to act in committee meetings, in the classroom, in the library, and elsewhere. Then each student copied the suggested rules from the chalkboard. Each chairman was made responsible for his committee's actions. At the end of the week, a short time was
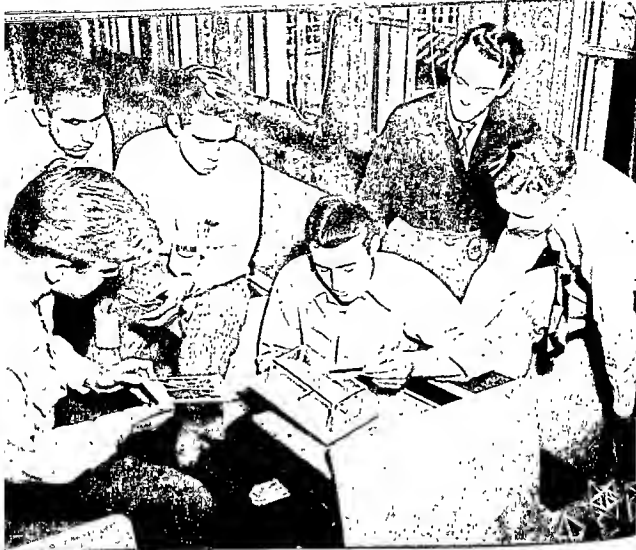
Fig. 7.8. What classroom or home experiences must precede small-group behavior of this type? (St. Louis, Missouri, Public Schools.)

allotted to whole-class discussion, led by Miss Nelson. This procedure eliminated most of her "policing" duties. Because the students shared in setting up the standards, they tried to follow them; there was little resentment of authority, and no threats of punishment on the part of Miss Nelson. The emotional atmosphere of the class was relatively free of the tension that so often appears when students feel that teacher-made rules are arbitrary.

One technique for helping students feel the need of formulating and evaluating rules of conduct is to make a recording of their activities, usually without their knowing it and during a time in which they are boisterous and noisy. When Mr. James discovered that his students started work soon after the bell rang but were very noisy and talkative, he had

a student assistant operate a recorder in the rear of the classroom. In a few minutes he asked the students if they felt they were noisy. When this brought forth a loud chorus of "No," he played the recording. The class found it difficult to accept the record, but were ready to discuss procedures for starting work. Subsequent records were made to measure their progress.

Although procedures like these will work in most classrooms, they may not be successful where the morale is very low throughout the entire school or where many students are not interested in the work or have already learned antisocial behavior. The teacher should attempt to help very unruly students to establish standards of behavior.

The emotional climate of any classroom can be controlled to a high degree. Establishing a feeling of friendliness among students, of trust and respect for the teacher, and of mutual consideration on the part of both students and teacher is important in initiating purposeful activities (Fig. 7.8). How the students feel during the initial stages vitally affects what they do and how they behave the rest of the time they remain with the teacher.

SUMMARY

Leadership, enthusiasm, and control are required in initiating purposeful unit and daily activities. The teacher can get off to a good start with a class when student attention is focused on the teacher and the proposed learning outcomes, when individual and group goals are formulated by the students, when procedures for subsequent activities are organized, when the teacher becomes acquainted with the characteristics of both individual students and the class as a whole, and when a favorable emotional atmosphere, conducive to learning, is established.

A variety of methods and materials are useful in putting these principles into action, but they must be selected in terms of the desired outcomes, the maturity of the students, their previous experiences, and the teacher's personality and competence. The same teacher may need very different methods with two classes. A woman teacher of slight build and soft voice would undoubtedly use different methods than the woman of commanding stature and forceful voice. For all teachers, being enthusiastic about the students and the subject matter, showing courtesy, feeling secure himself and toward the class, and quickly establishing standards of conduct pay rich dividends.

Questions and Activities

1. List and discuss the advantages and disadvantages of having students sit in a circle or semicircle when a unit begins. What major difficulties are encountered in this arrangement in some classrooms?

2. What are the values of using concrete materials and familiar activities in initiating a unit?

3. Does a verbal or visual presentation, or one that combines both, attract attention more readily? Discuss the extent to which teachers vary in making verbal presentations effective, basing your remarks upon your experiences in high school and college.

4. Set up the specific procedures related to securing and holding the attention of a high-school class in your area of interest. Secure or make the materials required.

5. Outline procedures for helping students define goals.

6. How can a pretest, check list, or questionnaire be used to arouse interest and to help students understand the need for studying?

7. What are the major difficulties in the student-teacher planning of activities? What are its advantages and disadvantages?

8. Discuss the relationship between group objectives and a culminating activity.

9. Name and discuss factors which may prevent teachers from knowing their students as individuals.

10. Outline procedures for discovering and dealing with leaders, cliques, and isolates early in the classroom situation.

11. How and when should codes of student conduct be formulated? Should students be made responsible for administering punishments?

12. Appraise the methods used by the tenth-grade English teacher described in this chapter. Discuss those that are applicable in many high-school situations.

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O NCE the students have set tentative goals and planned activities under enthusiastic, positive teacher leadership, continuing study and persistent effort are required to carry the activities to successful completion. In classes and units where the problem-solving method is used, the next steps are to gather and analyze information, set up hypotheses (some refer to this as the research phase in unit teaching), test these hypotheses, and then apply the results in a culminating activity. Where the primary goal is for the individual student to develop a skill, as in typing, playing a musical instrument, singing, painting, reading, writing, or speaking a foreign language, the gathering and analyzing of printed and oral information, as research is usually thought of, is not the major activity. Rather, meaningful practice becomes the chief daily activity. Thus, no one method of teaching can be used in all units for completing activities (Fig. 8.1), because implementing the developmental sequence in learning (Chapter 3) and meeting the varying characteristics of youth (Chapter 2) require a variety of instructional methods, materials, and resources, and an appropriate amount of active student participation in goal setting.

In this chapter are presented three relatively detailed examples of unit teaching, based on the problem-solving method and applied to the development of understandings, skills, and attitudes. Then follows a discussion on implementing the sequence in a core class. These illustrations bring out clearly the four major instructional principles involved in completing activities successfully, and also the principles related to insight, practice, attitudes, and transfer in meaningful learning discussed in Chapter 3.

1. The developmental sequence in learning is implemented.
2. Continuing high motivation is essential.
3. Goal reorientation must be provided.
4. The teacher's plans are modified as necessary.

THE DEVELOPMENTAL SEQUENCE IN LEARNING IS IMPLEMENTED

The developmental sequence outlined in Chapter 2, briefly restated, includes (1) setting a goal; (2) directing attention and energy toward achieving it; (3) using intelligent trial and error to find a new method

or to refine already existing methods of reaching the goal; (4) applying previous experience to the task and by differentiation and integration developing new or better understandings, skills, and attitudes; (5) trying out these new responses and, if they are confirmed, using them in other situations. In initiating the unit, the students do the first two steps themselves; the teacher helps them plan the activities required for steps 3 and 4 which will culminate in an activity to confirm and apply the new learnings (step 5). This developmental sequence corresponds closely to the steps in problem solving: becoming aware of a problem and wanting to solve it, gathering and analyzing information, formulating hypotheses, testing the hypotheses, and applying the con-

Fig. 8.1. Why must teaching procedures be varied if different learning activities are to be successfully completed? (Top, New York City Board of Education, center and lower, Chicago, Illinois, Public Schools)

clusions. Because of this close relationship between problem solving and the developmental sequence in learning, the author believes it wise, not only in unit teaching, but in daily teaching and in the teacher's own learning, that a teacher attempt to implement the developmental sequence with problem solving.

The following units in a ninth-grade general science class, square dancing for students of varying ages, and tenth-grade music appreciation show the application of these principles and their possibilities in a core class.

A UNIT IN GENERAL SCIENCE

The unit in general science was organized around a central theme: "How can we conserve plant and animal life in this community?"[1] The high school is located in an urban community of about 20,000 population near the Rocky Mountains; some of the students come from nearby farms. The class in ninth-grade general science consists of thirty students. The activities in the first week may be classified as initiatory, those in the ninth week as culminating, and those in the intervening weeks as developmental.

As you read the outline, consider how you would improve the activities and teaching procedures or modify them to suit your own teaching situation.

WEEK ONE

Overview; setting goals (becoming aware of and stating problems); recognizing the need for study.

1. Discuss the theme of the unit and its relation to the preceding unit—conserving human resources in the community. Ask students to relate their own experiences with conservation. Write new words related to conservation on the chalkboard and examine them in the basic text.

2. Show and discuss a film on conservation. Define the new terminology in the film and discuss problems it presents.

3. Invite a forest ranger to talk to the class about conservation practices in national forests and mountain parks.

4. Help the students clarify and state the specific problems by (a) assigning reading in the basic text, (b) discussing previous activities, and (c) discussing problems volunteered by the students on the basis of their own experiences.

5. Administer a test of concepts and generalizations to discover where indi-

[1] Mr. LeRoy Kerns, science teacher at Colorado State College of Education Laboratory School, suggested the specific activities and their sequence.

vidual students are at present; give a sociometric test to discover whom students would like to work with; have the students check the three problems in which they are most interested.

WEEK TWO

Delimiting the scope of the problem and making preliminary plans for the culminating activity.

1. Discuss the major plant and animal resources in the area. Refer students to the basic textbook, supplementary references, and special books in the library for information concerning the value of plant and animal life. Use specific questions to relate this to the previous discussion and to the original statement of problems. Ask students to bring in other information on the subject, especially pictures, graphs, and charts, which are suitable for the study display.

2. Discuss materials the students bring in. Organize the class into four committees: conservation of city parks; conservation on the farm; conservation in the residential and industrial areas of the city; and conservation in mountain parks and forests. Make each committee responsible for the study display in the following weeks.

3. Hold a general class discussion of the procedures in organizing committees and the assigning of responsibility for work within committees. Supervise committee meetings so that no wide departures from procedures take place.

4. Discuss with the class the kind of information needed, where it may be obtained, who should obtain it, how records about it will be kept, and how it will be presented. Have each committee take up the same problems in connection with its particular area of interest.

5. Discuss the culminating activity—a demonstration of conservation practices by means of posters, graphs, charts, pictures, and models of water conservation plants. The demonstration is to be given at a PTA meeting seven weeks hence, but the posters and models will be on display during the entire week.

WEEK THREE

Gathering information and making a preliminary analysis of it.

1. Give the entire class reading assignments in the basic text and in supplementary reference sources; give help as needed in interpreting charts, graphs, etc. Allot part of the class period for individual reading.

2. Discuss library assignments. Outline and demonstrate definite procedures to help students locate specific kinds of information, take notes, make a bibliography, and behave in the library.

3. Discuss procedures for recording additional information obtained from the library and for discussing it in committees.

4. Plan a field trip to the surrounding rural area. Outline specific types of information to be obtained.

5. Make the field trip; note irrigated farming, dry farming, strip cropping, crop rotation, natural windbreaks such as grass or trees, artificial windbreaks, such as fences, grazing practices, animal feeding, insect control, and the like.

WEEKS FOUR AND FIVE

Gathering information, analyzing it, and making definite plans for the culminating activity.

1. In general, follow the plan for the third week, making a trip to a city park, examining various home and industrial landscaping arrangements. Note the variety and arrangement of plants, irrigation practices, features that make for beautification, recreational aspects, maintenance in parks, destruction of public property. Have the students continue their observation of homes, factories, and city parks outside school hours.

2. During the fifth week, make final plans for preparing posters, models, charts, and graphs, including securing the necessary art materials.

WEEKS SIX AND SEVEN

Gathering further information, putting major emphasis on analysis of information, methods for committees to present their work to class, and preparation of exhibits.

1. Make a field trip to national forest, with the forest ranger as guide. Note natural storage of water, water diversion, reservoir systems, and the use of water for generating electricity; plant conservation such as grazing practices, tree planting and lumbering, insect control, and fire control; and wildlife conservation practices.

2. Have the students put their exhibits in more definite form, and while they are doing this, have them check the comprehensiveness and accuracy of their understanding in both committee meetings and teacher-led discussion.

WEEK EIGHT

Synthesis and drawing of preliminary conclusions.

1. Conduct whole-class discussion, committee discussion, and individual committee work on projects.

2. Continue reading in the basic textbook.

WEEK NINE

Appraisal and application.

1. Use the first two days for committee reports. Arrange for the PTA demonstration to be made the third day. On the fourth day repeat the concepts test and give a problems test to discover to what extent the students understand

and apply their conclusions. On the fifth day, conduct a whole-class discussion of activities covered in the unit, including the demonstration and the tests. Outline the relationship of this unit to the next one on conserving mineral resources in both the community and the nation.

Opportunity for implementing problem-solving techniques was presented in both daily and weekly activities. The students' experiences throughout the unit --their first-hand observation of conservation practices in force or entirely lacking, the film they saw, the discussions they heard and took part in with their teacher and classmates, their reading in their textbook and in other sources, their contact with the ranger and other people in the community--all helped them formulate concepts and generalizations related to the conservation of plant and animal life. Thus, these concepts and generalizations gained meaning in guiding the students in an important phase of their daily living--conservation of resources.

Fig. 8.2. Many attitudes and skills, not directly related to science, should be acquired by these students. (Pittsburgh, Pennsylvania, Public Schools)

Planning the study display, making the posters, models, and graphs for it and explaining them to parents and classmates, taking the final tests, and finally discussing the unit activities provided an opportunity for testing and applying conclusions (confirming new responses and applying them).

Social skills and desirable conduct were called for in committee work, in the work at the library, in the field trips, in contacts with parents and other adults, and in whole-class discussion.

Gathering and analyzing information from various sources enabled the students to develop related skills (Fig. 8.2): reading efficiently, listening attentively, taking notes carefully, and making charts, graphs, and models for the demonstration.

A UNIT IN SQUARE DANCING

In organizing developmental activities to promote learning of skills, the teacher's major tasks are to know and to be able to demonstrate correct form; to know the entire skill and the best sequence for presentation for students in various stages of acquiring it; and to organize the length and spacing of practice periods efficiently and meaningfully for the pupil.

As instruction proceeds, the amount of practice increases to give the student greater accuracy, precision, and speed. Specific drills on part skills should be suited to individual learners. Assisting the student to identify his own errors and difficulties, to overcome them with help from his teacher, and to measure his progress is important in the developmental sequence. This sequence assumes that the student's total reaction—physical, mental, and emotional—progressively changes as he organizes and reorganizes experiences at a higher level of skill to achieve a more satisfying performance.

This square-dance unit was arranged for a mixed group of senior high-school students. The unit lasted seven weeks, and the class period was fifty minutes.[2]

WEEK ONE

1. Arrange for a group from an advanced physical education class to come to the gym to demonstrate form and precision. Have this group dance a rather elementary and then a more complicated square dance (two complete dances). Discuss their demonstration with the beginning dancers, noting the following briefly: (a) floor pattern, (b) relation of music to dance, (c) dancers' enjoyment of the activity. Ask the beginners to choose partners and form squares. Have them listen to a few phrases of music while you clap the beat. Instruct the students how to arrange for head, foot, and side couples, and for partners and corners. Demonstrate walking with the music; couples walk in a square (promenade). Demonstrate "swing with partner" and "swing with corner." Have the students follow the caller in doing a combination of the above basic steps to music.

2. Review the basic steps. Introduce "allemande left" and the "grand right and left." Practice without music. Give verbal cues such as "Left hand to corner, right hand to partner." Teach the dance "Take a Little Peek," using alle-

[2] Specific practice arrangements in this unit were proposed by Miss Doris Steffy, who has taught square dancing to groups from the elementary to the adult level.

mande left, grand right and left, and promenade as a "break" after each couple completes the square. Use verbal and physical cues for correct form as needed. Introduce and demonstrate "Birdie in the Cage."

3. Review the dances already learned. Instruct the dancers to listen closely to the caller so they will do what he asks. Use all the dance combinations the students have learned and have one couple do "Take a Little Peek," and a second couple do "Birdie in the Cage." When enjoyment is at its height, mention the culminating activity—a demonstration of square dancing to be given during the intermission at a school dance six weeks from now. Suggest that the dancers plan for the committees they will need.

4. Practice the simple routines learned. Introduce "Duck for the Oyster," using the break learned in an earlier lesson. Teach "Old Arkansaw," a combination of the patterns already familiar to the dancers.

WEEK TWO

1. Review the dances that you taught last week. Demonstrate the elbow swing and the balance with partner. Give the students an opportunity to practice. Teach "Split the Ring," using the above two patterns. Have the entire class practice a short period to achieve form and mastery of the steps. Devote the remainder of period to organizing the class into committees for the culminating activity.

2. Begin the daily activity from now on with the routines already learned. Have two couples (whom you've instructed previously) demonstrate the "do-si-do" while you describe this particular pattern verbally. Have two couples practice together, and two other couples walk through the pattern. Have the students who demonstrated the do-si-do assist the couples who are learning. Use the do-si-do as a break in a dance that the class knows. Demonstrate steps in the "Texas Star" that are not familiar, practice them, and then proceed to the whole dance.

3. On Friday, have the skilled group from the advanced physical education class demonstrate the circle dance; with them assisting, teach this dance to the beginners.

WEEK THREE

1. Begin with the circle dance. Review the dances most recently learned. Review the do-si-do with the entire group, having them walk it through. Use this step immediately in a dance with music. Use the rest of the period for committee reports and general discussion of the culminating activity.

2. Review circle dances. Begin a new dance, "Rye Waltz." Practice the waltz step. Find out which students are interested in calling some of the dances they already know and which ones want to spend extra time learning new dances.

3. Review all dances; diagnose errors and have the class work on these in small groups. Give student callers an opportunity to practice with the entire group. Determine whether committees need more time to work on the culminating activity and plan your time accordingly.

4. Spend increasingly more time on whole dances and less on steps. Intersperse practice periods with committee meetings.

WEEK FOUR

1. Have the students continue the dances they have learned. Use "openers" and "mixers" so they will dance with many partners. Give student callers an opportunity to call new dances. Give helpful suggestions to callers and dancers as needed. Spend considerable time on achieving precision and correct form both in dances reviewed and in the new ones. Ask for a class discussion of choices of dances for the demonstration.

WEEK FIVE

1. Follow the same general plan as in week four; practice round dances, square dances, and waltzes. Practice the dances that are to be used in the demonstration. Give the callers opportunity to practice so they will develop confidence and poise for the demonstration. Have each square perform for the remainder of the period.

WEEK SIX

1. Continue practice for precision and better form. By this time every student should be enjoying himself fully while dancing. The demonstration is to be given at the school dance on this Friday evening.

WEEK SEVEN

1. Discuss with the whole class the activities of the preceding weeks, particularly the demonstration. Have each committee—costume, props, and the general organization committee—meet and make recommendations on how their work might have been improved. Continue square dancing the first part of week and then introduce social dancing, the next unit.

In this sequence of activities, active practice held a central position. Planning the culminating activity served several purposes, chief of which were to provide rest periods during practice, to establish an immediate goal on which intensive practice could be focused, to acquire understandings and social skills not directly related to dancing, and to develop desirable attitudes toward dancing as a means of securing attention and approval from agemates (Fig. 8.3).

Fig. 8.3. How does a culminating activity improve daily practice? (New York City Board of Education.)

A UNIT IN MUSIC APPRECIATION (ATTITUDES)

We said previously that an attitude is a learned, emotionally toned predisposition to react in a characteristic way, favorable or unfavorable, toward an object, a person, or a group. Because attitudes are learned and not inherited and because they are of great significance in determining a student's conduct in many situations and his responses in a given learning situation, the teacher is concerned with the kind and intensity of attitudes which develop in the classroom (Fig. 8.4).

The vividness and intensity of feeling accompanying a particular situation are significant in the development of attitudes. Thus, a boy who has enjoyed speaking before the class throughout his earlier school years develops an extremely negative attitude toward it when his voice fails at a crucial point in the junior play. Similarly, the girl who has always liked to sing before a class develops a negative attitude toward it if, in her first appearance before a large group, she forgets the words and the audience snickers. So it is with many attitudes. A pleasant and moderately intense feeling is likely to clinch a particular desirable attitude; very intense, unpleasant feelings are likely to create unfavorable attitudes

DEVELOPING AND COMPLETING ACTIVITIES SUCCESSFULLY 207

which persist even through an extended program of attempted readjustment.

Because feelings are important in attitude formation, the total sensory aspects of experiences must be considered in attempting to create a particular attitude. The teacher who wants to engender a preference for good music in his students should have them hear and see performances involving good music in a setting of beauty and richness.

To summarize the foregoing, the following sequential generalizations are helpful in developing attitudes:

1. Express the desired attitude in your own conduct and performance.

2. Make the setting for the learning activities attractive to the students.

3. Make the activities themselves enjoyable; avoid interruptions and other disruptive incidents.

4. Appeal to as many sensory perceptions as possible.

5. Keep the verbal analysis of activities and performance at a minimum.

6. Conclude specific activities when enjoyment is at a relatively high pitch.

Here is a six-week unit in music appreciation for a tenth-grade class in a senior high school. The students are not skilled performers. The major purpose of the unit is to develop a preference for good music and enjoyment in listening to it. The content, method, and sequence are subject to great variation with different groups.[3]

WEEK ONE

1. The room is decorated attractively, with chairs arranged in a semicircle facing a combination radio-phonograph. As the students enter, a recording made by the school chorus accompanied by the orchestra is playing softly. (This practice of having a record playing as the students enter the room is continued every day. A record that the majority of the class like is played while they are collecting materials and leaving the room at the end of the period.)

2. Discuss with the students the general objective of the unit—listening to different types of music for enjoyment. Have each student list in order the kinds he prefers, including titles, arrangements, and performers.

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[3] Gerald Meeder, a student teacher at George Washington High School in San Francisco, California, originated and executed the general plan. James Barrett, Supervisor of Music at Hutchinson Junior College in Hutchinson, Kansas, studied its applicability in other high-school classes.
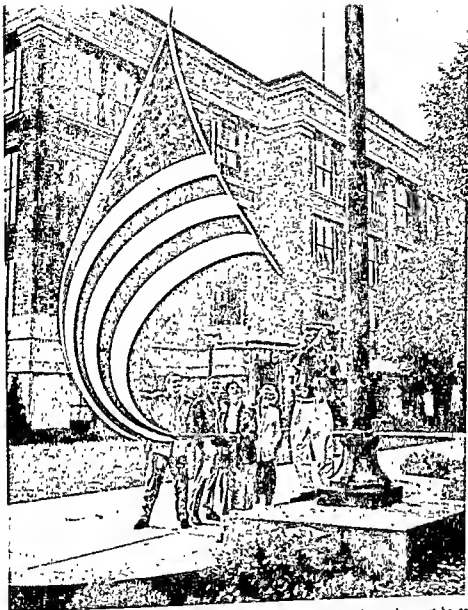
Fig. 8.4. In attempting to develop favorable attitudes in his students, the teacher must be concerned about the intensity and pleasantness or unpleasantness of their feelings in particular situations. (Top, School District of the City of Allentown, Pennsylvania; lower, Wilmington, Delaware, Public Schools.)

3. Have students bring to class the records they like and play several of them each day. Also, bring to class different recordings of the same composition made by various orchestras and soloists.

4. Ask the students what movies they like. Discuss briefly the background music in these films and the student reaction to it.

5. Plan for a student-directed listening club to meet voluntarily once a week during noon hour.

Plan for student committees to keep the bulletin board up to date with notices of musical events in the school, churches, theaters, civic centers, and the like. On any day, discuss briefly musical events the students have attended. Have them keep diaries of what they hear and see, and how it impressed them. Have the entire class keep a program scrapbook.

WEEK TWO

1. Bring in records of background music of films. Ask the students to identify the films to which the music belongs. Find out how they feel when they listen to the music now and when they heard it as part of the actual film.

2. Continue playing background film music and the records which students prefer. (Much of the background music for romance films is classical and semi-classical.)

3. Hold the student's attention on semiclassical and classical music by showing colored slides with the recordings—the turbulent surf in the Pacific, a vast sweep of calm ocean, the snow-covered peaks of Sierras, fog creeping in over the Golden Gate, a busy hour on Market Street, a boy and girl dancing, etc. (These are likely also to spark the imagination and provide incentive for brief discussions.)

4. Present popular ballads ranging from straight dance recordings to symphonic arrangements of the same selections. This makes possible a good transition from popular to classical music. Many popular tunes are arranged exactly as symphonic music is. Many people learn to understand really complex music by studying complex arrangements of simple melodies.

WEEK THREE

1. Progress from symphonic arrangements of popular ballads to similar arrangements of semiclassics and classics, and from modern to early composers. Introduce secular and sacred choral music.

2. Continue to play student preferences, but less frequently and for shorter periods.

3. Select radio and television programs which fit into the general pattern of the class activity.

4. Play brief selections of "mood" music, accompanying them with colored slides. Have the students discuss their mental pictures, but do not over-emphasize this aspect.

5. Outline plans for the culminating activity—a "concert" period for the faculty each day during the sixth week. The students will select the records, greet the faculty, introduce the records, and introduce visual materials into the program.

1. Continue with the above general pattern. Between selections, start giving brief facts about their composers and the period they lived in. Suggest reference books in which the students may find out more about composers of their favorite selections.

WEEK FIVE

1. Continue the above pattern, but give more attention to allied subjects such as composers' lives and historical trends. Continue playing student-preferred records. These preferences are being listed by the students each week so that they and the teacher will be kept aware of changing preferences.

WEEK SIX

1. Continue as above. Play recordings of short arias, choruses, and overtures from opera. Give attention to allied subjects and introduce musical instruments, each one played by an expert. Use records to help students grasp the role of the particular instrument in the selection.

2. Conduct the "concert" periods for the faculty.

3. Discuss these periods briefly each day.

4. Have the students list their present preferences by specific title and arrangement and compare them with their original preferences.

The direction and sequence of activities hereafter depends upon the results achieved during the first six weeks. The students may show greater interest in composers, arrangements, and instruments in order to learn about clefs, the musical staff, major and minor scales, and harmony. Some may want to learn to play an instrument, and most will want to spend some time singing.

A CORE CLASS

The preceding discussion was concerned with developmental activities organized on subject lines in one-hour periods for particular grades. The scope of the activities was somewhat limited because of time, organization by subjects, and grade placement. In the junior or senior high school where a core class is required for all students at each grade level and where other subjects are offered as electives, learning activities may cross subject lines, grade lines, and school boundary lines. Adaptations of the above three units will serve as illustrations.

Plan for student committees to keep the bulletin board up to date with notices of musical events in the school, churches, theaters, civic centers, and the like. On any day, discuss briefly musical events the students have attended. Have them keep diaries of what they hear and see, and how it impressed them. Have the entire class keep a program scrapbook.

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Suppose the unit on general science had been set up for a ninth-grade core class that meets for half a day. The separate classes in general science, social studies, mathematics, and English have been integrated into this one core class, and it is required of everyone in the grade. The understandings to be acquired now include some related to the geography of the region, the history and economic life of the people and region, and various art media. Also, arithmetic problems involved in making the models, figuring the cost of maintaining and improving the parks, irrigation, fertilization, and the like may be used to develop mathematical understandings and skills. Writing letters asking federal, state, and local conservation agencies for materials, writing reports of field trips, and writing themes on any aspect of the problem may be included to improve writing skills and the use of English. The literature of the region may be explored when the class is studying the history of the people. The activities involved in the field trips may be broadened to include interviewing various people in the community. These activities may then be reported back to the class, thus furthering oral communication skills.

This integration of activities requires careful and detailed planning by the teacher and students, broader understandings and skills than many teachers possess, and close coöperation among the teachers who have the requisite abilities and can therefore contribute most to the students' experiences. If this integration is efficient, it is entirely possible that the various separate-subject activities will be organized into more meaningful educative experiences by the students (Fig. 8.5).

Crossing Grade Lines

The units in square dancing and music appreciation can be adapted for students from different grades. Suppose that the required core class is supplemented with physical education that is required each day of every student. Two periods in a six-period day would be left for electives such as algebra, art, music, foreign language, commercial subjects, industrial arts, and the like. Square dancing could well be one of the activities in physical education, available to any students from any grade who choose it. This also applies to the unit in music appreciation.

The units described above included activities that took students out into the community and that brought people from the community to the school. Activities such as these present excellent possibilities for increasing motivation, assuring greater transfer from school learning to out-of-school life, establishing meaningfulness of the learning, and creating a desirable community attitude toward the school.

Fig 8 5. Various subject-matter fields must be drawn upon to understand the cold war. Whose responsibility is it to help students integrate knowledge from various fields? (Toledo, Ohio, Public Schools.)

In connection with the unit in music appreciation, for example, some adolescents like sacred music, especially choral singing and organ music, as well as popular dance tunes. Furthermore, many of them have heard such music in the beautiful settings provided by churches. When a community has churches of various denominations—Protestant, Catholic, Jewish, and others—there is usually a good opportunity for visiting them. Visits to the churches, planned by the teacher and the minister concerned and approved by the parents, may be made for the purpose of discovering what the music in the different churches is like. It is entirely possible that such visits may enable both students and teacher to find some likeness among the various religious groups and to develop a feeling of beauty and respect for the spirit expressed in the music of each one.

Although trips to churches may not be practicable in some communities, the underlying idea may be applied to a variety of developmental activities that will assure high motivation and positive transfer by relating important aspects of the adolescent's school life to his role in the community.

CONTINUING HIGH MOTIVATION IS ESSENTIAL

Especially during junior high school, young people live largely in the present, and interest in particular activities wanes rapidly. Teachers often

arouse great interest at first but fail to give particular students sufficient attention when their interest and energy in classroom learning begin to wane. Some students use poor methods of working and concentrating. They start out energetically with every intention of completing a given task; but as the work becomes more concentrated or strenuous, they give

Fig. 8.6. Why must high motivation be considered throughout unit teaching? What conditions contribute to it? (This and Fig. 8.7, School District of Philadelphia, Pennsylvania.)

up. If a teacher is to implement a developmental sequence, which meets individual differences and yet keeps the entire group moving in the desired direction, he must provide continuing high motivation (Fig. 8.6).

Five of the more important previously established generalizations concerning motivation in learning should now be reviewed. The various units described in this and the two preceding chapters present specific examples of how these generalizations apply.

1. Learning activities that are related to a student's motives consistently hold attention and direct energy. Three motives most important to adolescents that may be capitalized upon in the classroom are to explore, to affiliate with and secure approval from agemates and adults, and to achieve. When interest begins to wane, interspersing the daily learning situations with such activities as reading, discussing, working at the chalkboard, making models and charts, managing a study display, doing library research, going on field trips, experimenting in science, and the like satisfy the exploratory motive.

Most students want to belong to a group and to receive approval for work well done. This motive may be capitalized upon in group projects, committee work, and the like.

The need to achieve can be met only as the student progresses toward his goals.

2. Knowledge of progress is essential to motivation. Helping students establish methods and techniques for measuring progress must always be considered in a learning situation. Keeping a record of reading rate, speed in typing or shorthand, of new words learned, tape recordings of performance in speech or music, frequent analysis of themes or paintings, tests and examinations at intervals—these are a few of many effective methods by which students can measure their progress.

Completing a part, however small, of an activity keeps a student's energy directed for a longer time toward its full completion. This sense of accomplishment, which is closely related to measuring progress, emphasizes the daily need for the teacher to consider the present as well as the future. Each of us recognizes its importance in his own work. Unless we feel, each day, that we have completed something that is part of a larger pattern, we lose interest in our daily activities.

3. A feeling of success is imperative if interest and effort are to continue. The total situation must be so organized that each student can experience at least some success. Any activities so difficult that failure follows regardless of the pupil's effort to succeed can produce nothing eventually but lack of effort and waning interest.

4. Concrete and symbolic rewards are better incentives for learning than punishment and reproof. The teacher should praise freely, primarily to satisfy the adolescent's need for adult approval. Concrete rewards should be given only when necessary to arouse interest in work. Criti-

eism should be constructive and objective, directed toward the performance rather than toward the student. Helping an adolescent identify and overcome any errors in conduct and performance tends to heighten interest in classroom activities.

5. Learning activities hold the student's attention and direct his energy consistently over a longer time the more they are related to his present interests. Obviously, therefore, it is important for the teacher to help a student relate these activities to his present interests and thus identify new and wider interests.

GOAL REORIENTATION IS PROVIDED

In each unit in this chapter a goal in the form of a culminating activity was discussed—presenting a conservation exhibition for the PTA, giving a square-dance exhibition during the intermission at a school dance, and conducting a "concert" period for the faculty. In other words, each group had as its goal reaching a certain level of performance and demonstrating achievement at a given time. Each student in the group will participate in these activities as he wants to make the performance successful and identifies his individual role in doing so.

Realistic goal setting is learned and follows a developmental sequence: feeling a need in a particular context; vaguely seeing the relationship between the need, methods of work, and the final goal; devising methods for reaching the goal; and, as progress is made, perceiving more clearly both the goal and appropriate methods for reaching it. The goal itself is frequently modified while an individual is working toward it.

As learning continues, two procedures are effective in students' goal reorientation. (1) The teacher evaluates the student's performance, progress, methods, and use of time in relation to his goal. Evaluation may be made in whole-class discussion, in committee meetings, in conferences with students, or in comments on written work. (2) The teacher helps the student formulate criteria for evaluating his immediate performance in relation to his goal. This can be done by having the student periodically estimate his progress, having two students discuss their evaluations with each other, and having an evaluative interview with students as needed. If committees have been organized, the need for and frequency of individual interviews will be lessened, but not completely eliminated, because the committee members assume increasing responsibility for
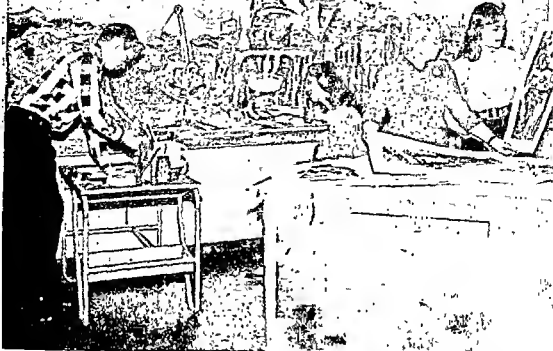
Fig. 8.7. What techniques are appropriate for adjusting both student and teacher goals?

the success of the culminating activity and for helping one another determine what is necessary to make it a success.

In some high schools practically all the goals related to classroom learning are set by the teacher because of preference or curriculum prescriptions. When students have had little experience in setting their own goals, the teacher must start slowly in giving them this responsibility; he should anticipate that a relatively long time will be needed before they reach the point where they can set reasonably realistic goals in relation to their abilities. Generally, two types of students need considerable help in this respect. The first has high ability but little aspiration; he is satisfied with a low level of performance and does not utilize his energy for maximum achievement. The second has experienced many *failures. He sets his goals too high, too low, and very erratically; he does* not seem to profit from experiences in which he could change his goals or his methods.

Goal reorientation is a problem for the teacher, too. Frequently, in preplanning and during actual teaching he sets a particular quantity of work, level of performance, or some other criterion that is to be achieved on a

specific date. As the class continues and the anticipated progress is not made, the teacher's goals need reorientation. This requires flexibility and a great deal of careful judgment on his part because the goals of the students are very dependent on the goals the teacher wants them to reach (Fig. 8.7).

THE TEACHER'S PLANS ARE MODIFIED AS NECESSARY

In preplanning a unit, as we have seen, the teacher estimates at what rate the learning activities will proceed, identifies objectives, outlines the major subject content, and plans, with tentative time limits for completion, the initiatory, developmental, and culminating activities that will achieve the objectives. He decides on the materials and resources required, and the approximate time at which they will be used. He prepares evaluation instruments and procedures and sets tentative dates for this phase. Each of these aspects of planning and executing plans requires a degree of flexibility, as will become apparent after brief examination of each one.

MODIFYING OBJECTIVES

In identifying and stating objectives, the teacher may include some which the class does not accept readily, or the students may propose some which are more appropriate to their specific interests and needs than those he suggested. It is usually true that the teacher knows more about socially valid objectives than the students do. As actual teaching gets under way, however, the following factors may cause the teacher to change certain objectives or to raise or lower the level of student achievement:

1. Student ability and achievement in relation to the particular objectives have been overestimated or underestimated.

2. Individual differences among the students are so great that some of the class have already acquired some of the understandings and skills, whereas it becomes apparent that the less advanced students stand no chance of achieving them.

3. The goals of the students are not in complete harmony with those stated by the teacher.

Some authorities advocate that teachers do not preplan objectives but arrive at them in coöperation with the students when the unit begins.

This may be wise for teachers who are relatively unacquainted with their students, with their school's objectives, and with the general objectives of education. But if the teacher does not establish the direction instruction is to take, a great deal of time will be lost because he is therefore unable to provide the necessary leadership in the coöperative process. Generally, students need positive leadership in goal setting.

MODIFYING CONTENT

As was made clear earlier, subject content is included in preplanning so that major facts, information, and related skills will receive due emphasis, the content will be most meaningful for the students, and the teacher will be familiar with the subject-matter field. In the units on conservation and square dancing, it is probable that the teacher would need to depart little if at all from the original organization of the content. But in the music appreciation unit, he might need to make wide changes in the original organization.

Never, under any conditions, should mastering a preplanned content in a certain time be demanded without consideration of the learning rate of the students. The material may have been "covered" by the teacher, but the students will not have learned it. It is equally important that student progress not be held up because the teacher follows the content outline rigidly.

MODIFYING ACTIVITIES

Learning activities—"what we are going to do"—capture and hold student interest more than the stated objectives and subject content. Students need to share more in the planning of activities than in any other phase of unit work. They often propose excellent activities that differ from those planned by the teacher. When these suggestions are accepted, time schedules may need to be modified. The teacher always leads the planning. It is his responsibility to establish the suitability of student-proposed activities and to shorten or lengthen the time limits within which particular activities must be completed. Far from violating any principle of democracy or of effective learning, this gives the students a feeling of greater security because they know the time limits for choosing and completing activities. They do not resent such limits except as arbitrariness on the part of the teacher enters into them.

The materials required vary from one situation to another. Materials gathered currently by the students are frequently as meaningful and educational as those the teacher suggests. It is well to plan definitely on using materials collected by the students so that they will be brought to class when they will be most valuable for the learning activity.

A definite schedule should be followed in showing motion pictures, bringing people from the community to the school, taking students on field trips, or using equipment or supplies from an outside source. If a film is ordered for showing on a given date, the class should be ready to see it on that date. Plans for bringing members of the community to the classroom or for taking students on field trips should not be suddenly changed. When a teacher obtains microscopes from the science laboratory, art materials from the art room, records and a player from the music room, or maps, charts, and graphs from a social studies class, he should return them when he has promised to. When the use of materials and resources involves the time schedules of others, the teacher must hold to the schedules rigidly and make sure that class is ready for the efficient use of such materials.

MODIFYING EVALUATION PROCEDURES

The dates on which tests will be given, student conferences held, and students' self-evaluation begun are usually determined in preplanning the unit. These, too, may be altered, depending on the reason for doing so and the rate at which class activities are completed. However, in ascertaining the changes in understandings, skills, and attitudes during a unit, the teacher must give the test only at the beginning and the end of the unit. In this case the schedule must be followed rigidly.

Obviously, a preplanned achievement test should not be given on a certain date or even at the end of a semester, when the class has had no opportunity to learn the subject matter being tested.

The most important function of evaluation in secondary education—helping students develop efficient methods of self-appraisal—requires considerable flexibility on the part of the teacher because it is a learned skill (Fig. 8.8). Students learn it, as they do other skills, at various rates of speed, and some need much more help than others. Hence it is difficult

to schedule it far in advance. But completing learning activities successfully requires continuous self-appraisal by both students and teacher, a subject that is treated more fully in the next chapter.

SUMMARY

Learning activities are planned and executed to help students acquire understandings, skills, and attitudes related to goals. Student goals are most efficient in directing energy over a period of time when they are in the form of a project to be completed, a problem to be solved, a higher level of skill to be reached. Since

Fig. 8 8 Why is self-appraisal more important to this student than being graded on his performance? (San Diego, California, City Schools Photo)

adolescents vary in many respects—in maturity, capacity for learning, methods of work, intensity of motivation, and achievement—activities which implement a developmental sequence in learning and at the same time take individual differences into consideration—must necessarily provide variety, utilize a wealth of materials and resources, be made vital by the instructional methods used, and allow for appropriate student participation in making and executing plans.

Goal-reaching activities often start off with great enthusiasm, but interest in them soon wanes. Therefore, keeping student interest and work output at a high level, helping the students set more realistic goals and outline methods for achieving them, and being flexible in following schedules are important in completing learning activities successfully. The possibility for enriching learning experiences for all secondary-school students is unlimited if the developmental sequence in learning is implemented in classroom practices.

Questions and Activities

1. List at least five major understandings in your area of subject-matter interest that students might gain over a given time. Outline the developmental activities you would use. What skills and attitudes should be developed simultaneously?

2. In which subject fields does the problem-solving method of teaching work well? In which does it not work so well? Why?

3. Appraise the conservation unit in terms of the four main principles discussed in this chapter.

4. Apply the sequence in the unit on square dancing to teaching typing, music, English composition, crafts, oral expression, how to operate a movie projector, or some other skill.

5. What are the major difficulties in teaching a core class for a period of two or three hours? What are the values? Can learning be completed more successfully in a core class or in a separate subject? Give reasons for your answer.

6. On the basis of your own learning experiences, discuss the importance of continuous high motivation.

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9.

To MANY teachers the process of evaluating and reporting is one of giving a series of exercises and tests, marking them, adding or averaging the marks, and entering them on a small card which is to be taken home to be signed by a parent, usually the mother. The process is often quick, simple, and terminal. Research has shown us, however, that if evaluating and reporting pupil progress is to be effective, it must be a continuous, coöperative, and cumulative procedure." [1]

Evaluating progress in learning can be done well when it is based upon these principles:

1. Evaluation procedures are related to objectives.
2. Efficient learning requires continuous evaluation.
3. Teacher-student coöperation is essential.
4. Evaluation focuses on the individual student.
5. Value judgments are needed.
6. Varied procedures and instruments are required.
7. Evaluation provides necessary information for reporting progress.
8. Daily evaluation facilitates progress in learning.

Each of these principles has already been illustrated in the various units in the three preceding chapters, but not so extensively as have other characteristics of good teaching-learning situations. For this reason, many other examples are given in the present chapter.

EVALUATION PROCEDURES ARE RELATED TO OBJECTIVES

Evaluation is concerned with appraising student progress toward objectives which are aimed at higher levels of understandings, skills, and attitudes. In a well-organized program, both school and teacher objectives are in close harmony with student goals, although they may be stated quite differently. These objectives should guide the selection and use of evaluation procedures.

Each teacher must decide the extent to which the learning activities will be directed toward achieving objectives based on a subject-matter area, as compared with more comprehensive objectives not directly re-

[1] John W. M. Rothney, *What Research Says to the Teacher: Evaluating and Reporting Pupil Progress,* Washington: National Education Association, 1955, p. 3.

Fig. 9.1. What objectives, both subject matter and more comprehensive, should be included in a social studies unit on the westward movement in the United States? Why should evaluation be related to both types of objectives? (School District of Philadelphia)

lated to subject matter. In a unit on labor in an American history class, three major objectives based on the subject area might be: The student understands the problems of labor in modern life, develops skill in analyzing them, and establishes an unbiased attitude toward them. More comprehensive objectives might be: The student understands how labor problems affect his own economic status, acquires social skills in adjusting to his classmates and the teacher, and has a friendly attitude toward his classmates (Fig. 9.1). Because the school has had to assume increasing responsibility for guiding not only the intellectual but also the physical, social, emotional, and moral aspects of adolescence, its objectives should include more of these less tangible but highly important areas of growth, and evaluation procedures should appraise student progress toward them.

EFFICIENT LEARNING REQUIRES CONTINUOUS EVALUATION

Making progress toward goals is an extremely powerful motivating force in learning. For students to continue to show interest in an activity,

Fig. 9.2. Continuous evaluation helps these students learn efficiently. Why is teacher-student coöperation essential in evaluating student progress? (Evansville, Indiana, Public Schools.)

they must have some knowledge of their progress so that they will experience feelings of success. For the teacher to ascertain his students' progress he must know where they were at the beginning of the activity, and also give them this information. He also needs to assist most students in measuring progress because of their lack of skill in it. Teacher-made tests may be helpful when the tests are carefully planned and the scores are clearly interpreted to the class. Student-teacher conferences wherein students' progress is examined are also useful, as are such procedures as keeping individual charts, making scrapbooks, keeping notebooks up to date, and making self-evaluations. Since learning proceeds more efficiently when students know where they are and evaluate their own progress, evaluation must take this important characteristic of learning into account.

TEACHER-STUDENT COÖPERATION IS ESSENTIAL

Since the student is to ascertain his own progress in learning, he and the teacher must work together in identifying objectives, collecting and interpreting evidence, and using the evidence (Fig. 9.2). By the time students finish high school they are expected to set realistic goals and evaluate their progress toward these goals; accordingly the teacher provides opportunities for exercising this important activity when he can guide it intelligently. Furthermore, these opportunities broaden the basis on which the teacher evaluates because he thus observes the student's methods of self-appraisal.

It is the teacher's responsibility to determine the extent to which the students share in gathering, interpreting, and using evidence. Information the teacher obtains from student diaries, from problem check lists, from interest blanks, and from intelligence, achievement, and sociometric tests should be interpreted not to groups of students but rather to individual students. Depending on the particular student, it may be wise to withhold some of this information. But in areas directly related to learning progress, it seems desirable for the teacher to encourage his

students to share in all phases of evaluation so that they will discover their strengths and weaknesses and use such information for self-improvement.

EVALUATION FOCUSES ON THE INDIVIDUAL STUDENT

A general goal of secondary education is to provide classroom activities in which each student can make reasonable progress in line with his capacities. As has been said, boys and girls mature physically and mentally at different rates, differences in earlier educational experiences lead to wide differences in achievement, and academic and social abilities and the ability to express oneself are not distributed equally among students. Unfortunately, in many areas of learning there are no accurate standards which identify the progress students with certain abilities should make in a given time. Therefore, comparisons with classmates are sometimes necessary for this purpose.

Progress made by individuals in relation to their tested abilities may be ascertained by standardized achievement tests when the same test or an alternate form of it is repeated. In using standardized tests for this purpose, the objectives of instruction must be directed toward

Fig. 9.3. What information would be helpful in predicting how each of these students might do in art? English? Your special field? (Richmond, Virginia, Public Schools.)

achieving the results that the test measures, and each individual's second score must be compared with his first. This is also true of teacher-made tests.

Intelligence tests alone should not be relied upon to estimate how much progress a student should make during a given period of time. The IQ is useful in appraising the performance expected from students in academic areas such as mathematics, English, and science, for there is a positive correlation between IQ and achievement. The correlation is not close enough, however, to warrant the conclusion that a student with an IQ of 100 will be average in these subjects. Furthermore, though IQ

scores tend to remain constant, any student's IQ may vary by as much as 30 points when two different group tests are given him during the school year. Educational psychologists and experienced teachers alike hesitate to predict the achievement in algebra made by individual students with IQ's in a narrow range—between 85 and 115 for example. From this it is clear that evaluation that is focused on the individual student must not be based on the premise that the IQ is an adequate indication of achievement in most areas. Instead, his IQ must be supplemented by achievement test scores, observations of him at work and in cocurricular activities, and conferences with him (Fig. 9.3).

The means for ascertaining progress in developing skills and attitudes are even less reliable than in the case of achievement in such subjects as mathematics and English. Therefore, appraisal of a student's progress toward the many objectives of a given unit must be based on the consideration that he is a growing individual whose capacities and talents are still unfolding. Simply comparing a student's progress with that of his classmates and then stopping often means failure to identify potentialities and a poor learning situation for the class as a whole.

VALUE JUDGMENTS ARE NEEDED

Most of us are familiar with report cards on which deportment was marked in terms of letter grades or percentages. This was an attempt to measure and report on a quality that is not readily subject to objective measurement. The meaning of the mark depended on comparison with other marks and was probably understood only by the teacher who gave it; it did not indicate the quality of the student's behavior in a meaningful way. A student might receive a C because he was tardy, because he refused to obey the teacher, because he ran down the steps, or because he did not do his work carefully. The present tendency is to use descriptive comments in rating the less objective kinds of behavior.

A teacher's work includes making value judgments concerning the objectives of instruction, deciding reasonable goals for students, and appraising the adequacy of a given student's performance, for example, in writing a theme, painting a picture (Fig. 9.4), or conducting himself well in the classroom. These are not readily measured with any kind of objective test; instead, value judgments are required. Judgments of this

kind are made every day by student and teacher and are important in evaluating progress toward goals; this will be discussed more fully in the last section of the chapter.

VARIOUS PROCEDURES AND INSTRUMENTS ARE REQUIRED

Evaluation of progress requires a variety of techniques and instruments. The major techniques include discovering where a student is at the beginning of the activity; keeping records of his progress as the learning proceeds; appraising his abilities, interests, and plans; and devising methods for accurate interpretation of data by both students and teacher.

Fig 9.4. Why are objective ratings and scores less appropriate than value judgments in a situation such as this? (Chicago, Illinois, Public Schools.)

The best available instruments should be used. The data yielded by standardized tests of achievement, intelligence, aptitude, personality, and vocational interest are valuable in understanding each student's developmental pattern. Progress in learning that is directly related to course objectives may be appraised by teacher-made tests. Informal evaluation procedures such as case studies, anecdotal records, sociometric tests, questionnaires, rating scales, check lists, student conferences, and case conferences which may include parents are often used to appraise qualities and values. Teachers who make the best evaluations use some of the above techniques and instruments, but no teacher uses all of them. Details concerning these procedures and instruments are now presented.

STANDARDIZED TESTS

The choice of appropriate standardized tests and their proper use facilitate evaluating student progress. A standardized achievement test given in algebra, for example, and then repeated, may be used to determine progress during a semester, one year, or two years.

The good standardized tests available today have four distinguishing characteristics. (1) The items have been carefully selected so that they measure what the test is supposed to measure. This is called curricular validity. Usually several experts have coöperated in building the test and have applied comprehensive experimental and statistical procedures to appraise its validity. Thus, the items in an arithmetic achievement test for junior high school have been selected on the basis of what is usually taught in this subject in Grades 7, 8, and 9 in various schools throughout the nation.

The reliability of the test has also been established; that is, the scoring system is accurate. If the test were completely reliable and two comparable forms of it were given to thirty students who had no opportunity to improve their performance between the tests, each student's score on the second test would be exactly the same as on the first. Even the best tests are subject to some error in measurement; therefore, reliability coefficients of 1.00 are relatively impossible. Many achievement tests have reliability coefficients higher than .90, which means that an individual's score on the test places him quite accurately in relation to others who also take the test.

2. Another feature of standardized tests is that the method of administration is standardized. In other words, definite instructions are given for administering the test, including the exact words to be used in instructions, the time allowed for completion, and the help the tester is permitted to give students.

3. In standardized tests, the scoring has been standardized. Keys for scoring and rules for deciding between correct and incorrect answers are provided. Thus, if two teachers scored the same set of forty tests, the resulting scores would be identical. Some of the scoring keys are exceedingly ingenious devices that facilitate scoring both accurately and quickly.

4. Interpretation of scores is either completely or partially standardized. National norms have been established by means of which each individual's score can be interpreted in terms of grade-placement equivalent, age equivalent, percentile, or some other form of derived score.

A very comprehensive survey of published tests, most of them standardized, appears in successive editions of the *Mental Measurements Yearbook*. In *The Fourth Mental Measurements Yearbook* an attempt was made to list all commercially available tests—educational, psychological, and vocational—that had been published in recent years.

Achievement Batteries. Tests have been standardized to measure important areas of school achievement, usually subject achievement. The test battery may be in a graded series for use at different grade levels through the adult, thus providing a continuous record of achievement. The following discussion will give you a better idea of an achievement battery; the test items are taken from an earlier edition of the *Progressive Achievement Tests.*[2]

The Advanced Battery, Form A, consists of five subtests which are subdivided as follows: Reading Vocabulary, Reading Comprehension, Mathematical Reasoning, Mathematical Fundamentals, and Language.

As you read the following four items from the test battery, evaluate them from the standpoint of conciseness and clarity of expression, decide what each item measures, and classify each item according to type—multiple choice, recall, alternate choice, etc.:

Directions: Underline the word which means the same or nearly the same as the first word, and write its number on the line to the right.

graph	(1) motive (2) diagram (3) bucket (4) synthesis	....
apparatus	(1) filament (2) mechanism (3) quadrant (4) synchronism	....
minister	(1) teacher (2) proctor (3) pastor (4) interval	....
plot	(1) plan (2) plenty (3) farce (4) episode	....

Directions: Draw a line under the largest number in each row and write it on the line to the right.

2/3	5/8	3/4	4/9	....
2	50%	.42	1.19	....

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[2] Ernest W. Tiegs and Willis W. Clark, *Progressive Achievement Tests*, Los Angeles: California Test Bureau, 1943 (now the *California Achievement Tests*).

Directions: Work these problems. Write the answer on the line to the right.

A swimming tank is 15 ft. wide, 50 ft. long, and has an average depth of 5 ft. How many cubic ft. of water will it hold? . . . .

A house valued at $8000 was insured for 80% of its value. The rate of insurance was 24 cents per $100.00. What was the amount of the premium? . . . .

Directions: Draw a line under the correct word and write its number on the line to the right.

(¹Isn't, ²Aren't) the baskets filled with flowers? . . . .

(I approve of ¹his, ²him) going. . . . .

The *Progressive Achievement Tests* are typical of many achievement batteries. The battery surveys achievement in the various subject fields taught in most schools. Norms are established for each subtest by which raw scores may be converted into derived scores and the subtest scores are plotted as a graph to yield a profile of achievement. Thus, level of achievement may be appraised on the basis of subtest scores. If further diagnosis of achievement is desired, test items related to specific parts of each subtest are listed in the manual that accompanies the tests.

Each achievement test has its special characteristics. In selecting a test battery, the teacher should consider what the test measures in relation to the objectives of the school and course, and also such factors as the validity and reliability of the test, the size of the sample population used in establishing norms, the time required for administration, ease of scoring, ease of converting raw score into derived score, and cost. When a school wants students to score high on a particular achievement battery, there is always a tendency to load the curriculum with classes and subject matter directed toward that end.

Character and Personality Tests. An interesting and widely used instrument for appraising an individual student is the *Problems Check List.*[3] It is one of many now available for measuring aspects of character and personality.

The *Check List* has forms for junior high school, high school, and college. The form for high school contains 330 problem statements in eleven general areas: (1) health and physical development; (2) finances, liv-

[3] Ross L. Mooney, *Problems Check List*. Columbus: Ohio State University Press, 1941.

ing conditions, and employment; (3) social and recreational activities; (4) social-psychological relations; (5) personal-psychological relations; (6) courtship, sex, and marriage; (7) home and family; (8) morals and religion; (9) adjustment to school work; (10) the future: vocational and educational; and (11) curriculum and teaching. The student responds to the 30 statements in each of these areas by checking those which he recognizes are problems and then circling those which are most troublesome. When administered properly to a class, the *Check List* provides the teacher with a summary of the problems the students consider troublesome, and also identifies the pupils who check many problems. Administered to the whole school, it provides a survey of student problems. In individual counseling, it helps both counselor and student locate specific problems for discussion.

Intelligence or Academic Aptitude Tests. Intelligence tests may be administered individually or in groups. The *Revised Stanford-Binet Scale* and the *Wechsler-Bellevue Intelligence Scale* are the most widely used individual tests. Group tests are used in most high schools. These group tests are increasingly referred to as academic or scholastic aptitude tests, because they are useful mainly in predicting achievement in academic subjects. Representative of many group verbal tests ranging from kindergarten to adult levels are the *Pintner General Ability Tests.*[4]

Here is one item from each of the eight subtests in the Advanced Tests, Form A, 1938; the instructions given here differ slightly from those in the test booklets.

Vocabulary: Select the word which means the same as the first:

quiet — (1) spite (2) require (3) rid (4) silence (5) noisy

Logical selection: Select the word most logically related to the first:

A bird always has or implies — (1) song (2) feathers (3) flight (4) cage (5) summer

Number sequence: Select the number which follows next in sequence:

9 12 15 18 21 24 — (a) 27 (b) 30 (c) 33 (d) 26 (e) 37

Best answer: Which means nearly the same as "A stitch in time saves nine"?

(1) A penny saved is a penny earned.

[4] Rudolf Pintner, Bess V. Cunningham, and Walter Durost, *Pintner General Ability Tests, Verbal Series*, Yonkers, World Book Company, 1938.

(2) One stitch is less expensive than nine stitches.
(3) Great people save time.
(4) Saving should take place only at a certain time.
(5) An ounce of prevention is worth a pound of cure.

Classification: Identify the word which does not belong with the others:

(1) banjo (2) bagpipe (3) guitar (4) mandolin (5) violin

Opposites: Select the word which means the opposite of the first:

diminish —   (1) skirmish (2) protract (3) deduct (4) increase
(5) reduce.

Analogies: Select the word which establishes the same relationship with the third as that established in the first two:

memory : recollection :: forgery :   (1) gross (2) cruelty (3) selfishness (4) negation (5) falsification

Arithmetic reasoning: Select the correct answer:

When I apply a weight of 1 pound to a pressure gauge, it registers one bubble. When I apply 2 pounds, it registers 4 bubbles. When I apply 4 pounds, it registers 16 bubbles. In all probability what will be the number of bubbles registered if I should apply 6 pounds?

(a) 36 (b) 64 (c) 22 (d) 96 (e) 28.

In connection with the items from the Pintner tests, consider two questions: (1) Do the items measure intelligence? (2) What advantages are there in using a series of tests which extends from the kindergarten to the adult level?

Achievement, Diagnostic, and Special Aptitude Tests. Many standardized achievement tests are available for separate subjects and broad fields instead of as part of a battery. Some of them are designed primarily to survey the extent of achievement; others include diagnostic features. All of them measure performance at the time of testing. Thus the score is a measure of achievement but it may have value in diagnosis or prognosis. In other words, a general achievement test administered in the twelfth grade may serve as an excellent aptitude test for college entrance.

Work-Study Skills, Test B of the *Iowa Every-Pupil Test of Basic Skills*,[5]

is an achievement test designed to measure skill in map reading, and ability to use references, index, and dictionary, and to read graphs, charts, and tables.

The map-reading test has three sections. Ten different maps are used; they are quite similar to the black-and-white maps in school textbooks. The factual information needed to answer the forty items in the test is provided. For example, the student examines a map and decides whether one, two, three, or four states have more than 80 inches of rainfall annually.

The twenty multiple-choice items in the use of references test require that the student know where to get specific information; no clues are given as in the map-reading test. Thus, the student from his own knowledge must decide which of the four sources to consult to answer a specific question such as the following:

Where is Croatia?
    (1) An encyclopedia   (2) an atlas   (3) *Inside Asia*   (4) *National Geographic Magazine*

The test on using an index presents a sample index. Each of twenty-two items on the test has one correct answer:

On what page does a discussion of consumer problems begin?

The test on using the dictionary presents sample dictionary items which supply the basic information for answering twenty-five multiple-choice items like the following:

Which of the following is correct?
    (1) Gilamonster   (2) gilamonster   (3) Gila monster   (4) Gila-monster.

The test on reading graphs, charts, and tables includes eight black-and-white figures which, if correctly interpreted, enable the student to answer twenty-seven multiple-choice items such as:

In what year was most merchandise exported from the United States?
    (1) 1938   (2) 1933   (3) 1930   (4) 1929.

J. Wayne Wrightstone, reviewing the 1941 edition of this test, had general commendation for it with two exceptions. He felt that the subtest scores were not sufficiently reliable to serve in diagnosing individual pupil achievement, and that the norms were not based on a sufficiently broad sample of the national population. In conclusion he said: "Teach-

ers and supervisors generally have accepted the Work-Study Skills Test as the most significant contribution of the Iowa Every-Pupil Test batteries. In the modern classroom the newer work-study skills are assuming a position of equality with the more established skills in reading, arithmetic, and language arts." [6]

Several points should be mentioned before we conclude this discussion of standardized tests. Tests in various areas were examined in some detail to illustrate the many that are available for gathering evaluative evidence. The earlier editions were quoted so that items in the latest editions would not be widely publicized; the older items are as good for our purposes as those in the most recent editions. No attempt was made to explore all the standardized tests or to recommend any specific test. Two opinions are pertinent at this time. (1) Carefully selected and intelligently used standardized tests provide useful data and are an im-

TABLE 9.1. Kinds of Tests Used and Their Administration in Each Grade (in Percentage)

Tests	Grade 7	Grade 6	Grade 9	Grade 10	Grade 11	Grade 12	Unclassified
Achievement	12.3	13.2	19.5	17.0	20.8	16.9	0.2
Academic aptitude	16.7	13.2	25.2	15.4	13.6	15.3	0.4
Aptitude tests other than academic	0.9	12.9	26.4	20.6	16.6	22.5	...
Interest inventories	0.1	0.7	36.0	15.8	12.2	35.1	...
Personality inventories	4.0	4.9	29.4	18.4	14.4	29.0	...

TABLE 9.2. Kinds of Tests Used and the Schools Using Each Kind

Tests	Schools Number	Percent
Achievement	492	96.9
Academic aptitude	497	97.8
Aptitude tests other than academic	271	53.3
Interest inventories	433	85.2
Personality inventories	244	44.1

[6] Oscar K. Buros (ed.), *The Third Mental Measurements Yearbook*, New Brunswick: Rutgers University Press, 1949, p. 571.

portant part of any evaluation program. (2) One of the best means of improving ability *in test construction is* careful study of standardized tests, the accompanying manuals, and critical reviews of these tests.

Tables 9.1 and 9.2 show the extent of the use of tests in California junior high schools, senior high schools, and schools that include Grades 7–12.[7] Table 9.1 shows the peak use of tests in Grade 9 with Grade 12 next. Table 9.2 shows that academic aptitude or group intelligence tests lead, followed very closely by achievement tests. The article suggests that more research is needed to set up a systematic testing program that will assure optimum use of all tests.

TEACHER-MADE TESTS

In constructing tests for classroom use, teachers are concerned with four general characteristics of tests. (1) Purpose: What is to be appraised in terms of the objectives of instruction? (2) Validity: How can the test items be made to measure what they are supposed to? (3) Reliability: How should the test be constructed and scored so that it will measure accurately? (4) Usability: Is the test administered and scored easily, and can the results be readily interpreted? These criteria apply to both essay and objective tests.

Essay Tests

Essay tests may be used to appraise the student's ability to express himself clearly in written form, his ability to recall and organize relatively large amounts of material, and his ability to evaluate critically. If all three purposes are to be achieved with one test item, *marking* must take all three factors into account. For example, the item "Evaluate the strengths and weaknesses of standardized tests" might be scored on the basis of how clearly the student expressed himself in written form, how many facts he cited, and how critical his evaluation was. If only one mark were to be given for the entire answer, the teacher would have to decide how much weight to give each factor; this is difficult to do. It is perhaps wise to provide *separate items for each factor,* but this often destroys the usefulness of the test. In other words, a test with many short-answer items

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[7] Carl A. Larson and William H. McCreary, "Testing Programs and Practices in California Public Schools," *California Journal of Secondary Education,* November, 1956.

would make possible more reliable marking but would not measure part of what it was intended to measure.

Clear Self-Expression. Ability to express oneself clearly in written form is important in classes in creative writing, English composition, journalism, and business English. A teacher might use an essay test in summary evaluation or in preliminary appraisal of this ability. Appropriate items might be:

> Outline the plot of *As You Like It.*
> Write a theme on . . .
> Discuss the importance of form in business letters.
> Summarize the important principles in writing a news story.

Recall and Organization. An essay test may be constructed to measure the student's ability to recall a relatively large amount of material and to organize it into a meaningful pattern. This ability may be important in social studies, science, and literature. Here are samples of recall questions, frequently called essay questions:

> What are the provisions of the Eighteenth Amendment?
> What nations are members of the United Nations?
> List the Presidents of the United States since 1860.

Marking these items is fairly simple, but they do not measure ability to organize facts except at a very low level.

Items that appraise organizational ability must be more general. They might follow this pattern:

> How did our tariff policies change from 1920 to 1940?
> Discuss the growth of organized labor since 1880.
> Describe how a federal revenue bill is enacted into law.

These questions require recall, longer answers, and more organization than the items in the first group, and they are more difficult to mark objectively.

Critical Evaluation. In many courses the teacher wants to develop the students' ability to evaluate critically. To some extent this ability may be measured by means of essay tests. Items intended for this purpose frequently begin with "How," "Why," "Compare," "Contrast," or some other term implying critical evaluation.

> Why were the Articles of Confederation unsatisfactory?

Fig. 9.5. What results of student research such as this could be appraised efficiently with essay tests? (Cincinnati, Ohio, Public Schools)

> Compare the tariff policies of the Republican and Democratic parties, 1880–1948.
>
> Contrast the editorials in the Chicago *Tribune* and those in the New York *Times.*
>
> Why does organized labor oppose the Taft-Hartley Act?

The emphasis in these questions is upon relationships, on the application of facts to broader problems, and on the evaluation of the facts and relationships.

In addition to the advantages already discussed, essay tests may also enable the student to acquire better methods of studying in preparing for an essay test than for an objective test (Fig. 9.5).

However, essay tests have certain weaknesses. Their validity is low because they do not cover a sufficiently comprehensive area of the subject

field. There appears to be no way to correct for quality of handwriting and use of English, which inevitably affect the tester's estimate of what is being measured. Essay tests also have low reliability, partly because only a few items may be answered during the test period and also because subjectivity enters the scoring. Greater validity and reliability can be obtained when teachers construct test items carefully, define the criteria for scoring the tests, and compare the marks they give with those given by others. Essay tests are more time-consuming than objective tests from the standpoint of administration and marking. The students need more time to take the test, and much more time is needed for scoring.

Objective Tests

Constructing valid and reliable objective tests is difficult and demands considerable experimentation. Points to watch for in test construction are indicated in the following discussion of four types of objective tests—completion, alternate-choice, multiple-choice, and matching.

Completion Tests. Completion tests are those in which the student is to fill in words or phrases that have been omitted. This type of test may measure ability to recall or ability to perceive relationships. Here are samples of each.

Standardized tests usually have higher . . . . , ... , and . . . . than do essay tests.

An achievement test administered near the end of the 12th grade is a good . . . . test for college entrance.

The following examples show poorly constructed completion items. How could each be improved?

A . . . . test score is meaningless until converted into a derived score.

The . . . . Test measures intelligence.

. . . . tests may be grouped into categories: . . . .

In the first item, the "A" gives a clue to the answer; the second is vague and indefinite because any one of several answers is correct; and there are so many missing words in the third that it is impossible to tell what is wanted.

Alternate-Choice Tests. An alternate-choice test requires that the student choose one of two answers. Samples follow:

True-false:

Evaluation is more comprehensive than measurement.

Discovering the relative position of students in the class is a primary purpose of evaluation.

Yes-No:

Are all tests reported in *The Fourth Mental Measurements Yearbook* standardized?

Choice of correct answer:

The revised Stanford-Binet Scale is administered (1) individually, (2) to groups.

The *Kuder Preference Record* measures (1) interest, (2) aptitude.

Discuss the following true-false items from the point of view of poor construction:

Standardized tests scarcely ever have reliability coefficients of 1.00.

Essay tests should not be used infrequently in any course.

Aptitude and ability are synonymous.

The title of Chapter 2 in this textbook is "Modern Adolescents."

You will probably agree that "scarcely ever" is vague. The "not . . . infrequently" makes the second difficult if not impossible to answer. The two words in the third usually but not always have different meanings; it depends upon the context in which they are used. The last item demands recall of specific words from the text; moreover, it could readily be a trick question because it is partially correct.

Alternate-choice tests are valuable because they can be adapted for use in many classes, a great deal of material can be tested in a short time, and they are easily scored. They are weak because guessing is encouraged, the student is presented with a wrong response, and it is extremely difficult to construct alternate-choice items that are always true or always false. When some of the items in the test are usually true and others are always true, the student must decide whether an item that is usually true should be marked true or false.

Multiple-Choice Tests. Multiple-choice tests are used widely because they are adaptable to many purposes and are useful in appraising understanding, discrimination, and judgment in many areas, including reading vocabulary, reading comprehension, mathematical reasoning, grammar,

map reading, use of references, use of dictionary; understanding of graphs, charts, tables; logical selection, classification, opposites, analogies, cause and effect. The standardized group intelligence and achievement tests currently available consist almost exclusively of multiple-choice items.

Multiple-choice items are more difficult to construct than are alternate-choice items. Here are some general suggestions that may be of value in this connection:

1. Make the wording of the items clear, avoiding such errors in English usage as were pointed out in connection with alternate-choice items.

2. Avoid giving clues to the correct choice. Do not make the correct choice longer or shorter or different grammatically, or have it include the same words that appear in the introductory question or incomplete statement. Distribute the correct answers among all choices in the complete test.

3. In testing judgment and discrimination, make all the choices plausible; one of them, however, must be the best choice. If four choices include two that are entirely unrelated or are easily identified as wrong, the student eliminates these two and the item accordingly becomes an alternate-choice item. A very low level of discrimination is required for the elimination of the two easily identified as incorrect.

4. Have the choices contain enough information so that cause, effect, or judgment is clearly stated. One-word choices are primarily useful in measuring factual information.

5. Provide for easy scoring. Most high-school students can well use answer sheets such as accompany standardized tests. If your test has no answer sheet, provide for answering each item at the left of the corresponding number. Entering the correct answers in your own copy of the test and matching this page by page, with the students' answers, facilitates easy scoring.

Matching Tests. Matching tests call for an item in one column to be paired with an item in another column. Many kinds of learnings involve the association of two things. As a rule, matching tests measure only whether the association has been made and whether the student recognizes it. Ordinarily, such tests do not test the extent to which meaning has been grasped.

A matching test increases in difficulty as the number of items to be

matched increases and as the number of items to be chosen increases over the given items. Twenty dates to be matched with twenty names is more difficult than if only five of each are given. Similarly, five authors to be matched with ten titles is more difficult than if there are five of each.

Here are five suggestions related to constructing matching tests. What others do you think are important?

1. Use related materials in the items to be matched. For example, if you want to test association of synonyms and association of men with events, use two groups of items—the first dealing with synonyms and the second with men and events.

2. Do not provide clues to answers. For example, if you capitalize one word in the right-hand column, capitalize all the words.

3. Include at least five items in each group to eliminate the possibility of guessing. When a group contains only four and the student knows two of them, he has a fifty-fifty chance of guessing the other two correctly. He may also give the same answer for these other two, thus insuring that one is correct.

4. Have the number of items in each group suit the students' developmental level and the difficulty of the items.

5. Extremely long groups are time-consuming and difficult to construct. More important, when many errors are made in long groups, the test can have little diagnostic value.

To summarize the discussion of teacher-made tests, it is usually wise to include several types of items: essay and completion items for measuring recall and relationship; alternate-choice items for facts, attitudes, information, and surface understandings; matching items for associations; and multiple-choice for deeper understandings, discriminations, and relationships. Problems in mathematics and science may be included in an objective test, the student supplying one correct answer or choosing it from three or more suggested answers. Scratch paper is supplied if necessary.

A major strength of teacher-made objective tests over standardized tests is that they can be constructed to measure outcomes that are directly related to class objectives. A major weakness is their low reliability. To insure the reliability of your test, make sure that you have constructed the best one possible and administered it well. To check its reliability, first score the odd-numbered and then the even-numbered items; record each student's score on the odd-numbered and then the

Fig. 9.6. Progress in this activity cannot be evaluated well with any paper-and-pencil test. (Wilmington, Delaware, Public Schools.)

even-numbered items. If the two scores for each student are exactly the same, the test is 100 percent reliable. Suppose that it is a 50-item test and that many students' scores show differences of four or more on the two parts. In other words, a student scores 20 on the 25 odd-numbered items and 15 on the 25 even-numbered items. The percentage correct for each part is 80 and 60, respectively, and the test is not highly reliable.

INFORMAL TECHNIQUES

Informal methods of evaluation are needed to supplement tests in four major areas: securing important kinds of information not obtain-

able with paper-and-pencil tests; appraising work and conduct; appraising less tangible but equally important aspects of growth such as motivation for learning, interests, and attitudes; and setting up methods for student self-appraisal (Fig. 9.6). The observational case study, sociometric tests, and check lists of emotional and social maturity were discussed in earlier chapters, and it may be well to review them. We are now concerned, however, with methods for securing information from students, rating scales for measuring less tangible but important outcomes of education, and self-evaluation techniques.

Securing Information from Students

Questionnaires, diaries, and conferences are frequently used in securing information from students.

The questionnaire may be adapted to obtaining many kinds of information and may be planned to elicit general or specific responses. Here are questions intended to secure general responses:

1. Do you feel well and physically fit?
2. What do you like most about your home?
3. What are your favorite recreational activities?
4. Which radio programs do you like most?
5. How do you get along with your classmates?
6. Which classes do you enjoy most?
7. What work do you do outside school?
8. What are your plans after graduation?
9. What kinds of work do you think you are best suited for?
10. Are you getting from school what you need most?

Each of these questions may be made more specific and incorporate a checking feature. In this case interpreting the answers is less difficult, but considerably more time is needed to construct the questionnaire; also, the student's response is guided, not completely voluntary. Thus, the first question: "Do you feel well and physically fit?" may be subdivided to include specifics, only one of which the student is to check:

a. All the time; never feel tired or ill.
b. Most of the time; feel tired once or twice each month.
c. Feel tired or unwell several times each month.
d. Feel tired or ill as many days as feel well.
e. Feel ill or tired most of the time.
f. Have not felt well for the past few months.

The student checks one of these choices but gives no reason for doing so. If the student's attitude toward his health as a whole is desired, it is better to use the general question without the specific choices.

Diaries, logs, and records kept by the student are sources of information. For example, a student may record the movies he sees and his reactions toward them, the books or magazines he reads, the activities he completes in a class, the actual hours he spends each day in study and recreation.

Interviews between teacher and student also provide information concerning interests, attitudes, and personal problems. The interview may be rigidly planned to get specific information, or it may be permissive. A permissive interview is one in which the student comes in to talk over a problem with his teacher, and the teacher listens carefully in order to estimate the seriousness of the problem and the student's attitude toward it.

The following suggestions may be helpful in using questionnaires, diaries, and interviews as sources of information:

1. Organize the informal procedures as carefully as you do written tests.

2. Make sure that the students know that in securing information you are interested only in providing a better learning situation for them.

3. Be prepared for varying degrees of frankness even though the students know your purpose in securing this information.

4. Do not use the results you obtain with informal techniques for comparative marking or as a basis for giving rewards, because students will give the answers they think are wanted.

Rating Scales

The simplest rating scales present two extremes, such as excellent or poor. More discriminating scales use four or more degrees—as many as can be reliably differentiated. It is wise to ask students to help construct such scales so that they understand them and are willing to coöperate in using them.

Rating scales attempt to arrive at objective estimates of performance, as in home economics or art. The two factors that mainly determine the objectivity of a scale are the exactness with which the performance being rated is defined and the discrimination with which the various

ratings are made. The reliability of a rating scale depends upon the competence of the person making the rating.

The following scale shows how participating in class activities might be rated:

1. Participates in all activities.
2. Participates in most activities.
3. Does most activities passively.
4. Does a few activities passively.
5. Actively resists participating in a few activities.
6. Actively resists participating in most activities.

This scale might be used by both teacher and student; and they would try to agree on the particular rating in conference.

In summary, informal techniques are valuable in evaluating student progress because the information thus secured is frequently as important as that obtained in tests. As yet no written tests have been devised that adequately measure quality

Fig. 9.7. What information obtained during a period or semester will be useful in reporting the progress of these students to their parents? (Erie, Pennsylvania, Public Schools.)

and values, motivation, or attitudes. Furthermore, such tests do not make available information on many aspects of the student's unique developmental pattern, information which is necessary for effective instruction.

EVALUATION PROVIDES INFORMATION NECESSARY FOR REPORTING PROGRESS

Reports are necessary to inform parents of their child's progress, to summarize his work in school, to summarize information for guidance purposes, and to aid administrative officers in deciding on promotions, graduation requirements, and the like.

An adequate reporting system should indicate each student's comparative achievement in subject understandings and skills, his achievement in subject understandings and skills in terms of his ability, and his progress in the more intangible areas of growth such as attitudes, work methods, social relationships, and emotional expression (Fig. 9.7). Whether parents should receive a report on the first of these is debat-

able; some schools report only the latter two. (Reporting progress is discussed in considerable detail in Chapter 17.)

DAILY EVALUATION FACILITATES PROGRESS IN LEARNING

The need for making value judgments and for using a variety of techniques has been made clear in the preceding sections of this chapter. At this point our concern is the need for helping students ascertain their daily progress. Often overlooked in evaluating are the small-group and whole-class discussions, the informal teacher-student conversations and conferences, the questions asked by students which the teacher handles either by answering them himself or by referring the student to other sources for answers, and the teacher's observation and comments about student skills. Questions such as the following lead to typical evaluative comments: Where did I make the mistake in this problem? How do I get this problem to work? Does this look all right? Was I playing or singing too softly? It is this evaluative interaction between teacher and students and among the students themselves that is essential for any day-to-day improvement in learning. As we have seen, tests—both teacher-made and standardized—are valuable in ascertaining progress over longer periods.

Thus, in considering evaluation from the standpoint of improving student learning, these daily evaluative experiences assume the highest significance. The following five out of 150 reports made by teachers demonstrate some typical daily evaluation procedures.

TWELFTH-GRADE ENGLISH

The class handed in themes one day. The next day they were returned, with check marks indicating various errors. The gross errors in usage, spelling, and sentence structure were listed on the chalkboard, with no indication as to whom they had been made by. After a class discussion of these errors, the students were asked to correct the themes that had been returned. The students spent the next fifteen minutes working with one another and the teacher in identifying and correcting the errors.

SEVENTH-GRADE PHYSICAL EDUCATION

The students engaged in three activities—tumbling, throwing a ball, and walking and moving with music. One student served as assistant leader in each activity. The students discussed their performance informally. The teacher commented favorably on a good performance; also, when necessary, he helped individual students improve their performance, using discussion and demonstration, and in some cases actually guiding a student's movements.

TENTH-GRADE HOME ECONOMICS

In six small kitchens in the larger room, groups of four girls each were to make a cake. First the teacher talked for five minutes about order in the kitchen and baking the cake. Any student was to ask questions whenever necessary. During the first part of the period the teacher went from one group to another, answering questions and making comments as needed. While the cakes were baking, the class discussed the fine points in making cakes. When the cakes had finished baking, the teacher led a discussion on what was good and not so good about each cake; usually the students made these points in response to the teacher's questions.

ELEVENTH-GRADE AMERICAN HISTORY

The students were completing an outline map showing the first colonies established by the various European countries. As they worked, the teacher answered questions himself or referred the students to appropriate sources for the answers. Working together in small groups, the students helped one another with the outline maps.

NINTH-GRADE SPANISH

The emphasis was on correct pronunciation in oral work and correct spelling, including verbs, in written work. In some instances the teacher called attention to an incorrect pronunciation and gave the correct one if the student could not; in other cases he asked other students for the correct one. For the written work, the teacher dictated a short passage in Spanish to the students. He then assigned the class to work together in pairs in correcting what they had written; the class asked questions when necessary.

The above reports are sufficient to indicate the importance of daily evaluation of progress and the variety of techniques used for it. The use of informal discussion in helping students evaluate and improve their conduct in both library and classroom and improve their work skills was brought out in Chapter 7. A tape recorder used early in a unit or semester and again later, described in Chapter 11, will be recognized as one of the most valuable of all evaluative procedures for ascertaining progress in any vocal activity, such as foreign languages, music, speech, committee meetings, and the like.

The daily evaluation discussed in this section is essential if students are to learn efficiently, for it enables them to identify correct responses and those on which improvement is needed. Furthermore, it provides on-the-spot help from teacher and classmates, which in turn leads to progress in learning (Fig. 9.8).

Evaluation is a process—preferably continuous—of securing and interpreting evidence to ascertain the quality and amount of student progress toward the objectives of both teacher and students. Such information helps them to appraise their strengths and weaknesses, plan more intelligently, make progress, and measure it. A comprehensive evaluation program requires various instruments such as standardized and teacher-made tests, and informal procedures such as records kept by students.

Standardized tests may be classified as achievement tests, character and personality tests, intelligence or academic aptitude tests, and diagnostic and special aptitude tests. Standardized tests provide useful evaluative evidence but sometimes do not measure outcomes directly related to the objectives of a class. Some teacher-made tests accomplish this more efficiently.

The commonly used teacher-made tests are the essay and the objective tests. Essay tests are useful in evaluating clarity of written work, ability to organize large bodies of factual information into meaningful patterns, and ability to evaluate critically. Their chief weaknesses are the length of time required for administration and scoring, and the difficulty of scoring them reliably. Objective tests can be scored more accurately and more easily, but are not well adapted to measuring the first two functions of essay tests. Four types of widely used objective test items are the completion, alternate-choice, multiple-choice, and matching items. Each of these has strengths and weaknesses and hence should be used for specific evaluation purposes. Multiple-choice items are generally superior to the others in appraising understandings, relationships, discrimination, and judgment.

Informal methods, including daily evaluation, are needed to supplement tests in five major areas: securing important kinds of information not obtainable with written tests, such as future plans; appraising qualities of performance, as in art or swimming; appraising conduct; appraising less tangible but important areas of growth, such as motivation for learning, interest in school, and attitudes toward classmates and teacher; and self-evaluating.

Fig. 9.8. Daily informal evaluation of student achievement and conduct is the most important part and the only irreplaceable component of the total evaluation program. (Milwaukee, Wisconsin, Public Schools.)

Questions and Activities

1. List the eight principles of evaluation and give a brief example of each.
2. Compare the values which accrue to students, teacher, and parents from a good program of evaluation in each classroom.
3. Name the characteristics of standardized tests. Examine several such tests in a given area such as reading, and the accompanying manuals, to determine their strengths and weaknesses.
4. What major purposes may be achieved by using standardized tests in the classroom? In the entire school?
5. Contrast the items used in standardized tests and in teacher-made tests.
6. Name the principal types of teacher-made tests. Describe cases in which teacher-made tests may be better than standardized tests.
7. How may teacher-made tests be used most advantageously? Describe procedures available to the teacher for helping students measure their own progress.
8. Construct a test based on the materials presented in this chapter. Include the following types of items: (a) completion, (b) alternate-choice, (c) multiple-choice, (d) matching, and (e) essay. Administer the test to discover its strengths and weaknesses.
9. Construct a questionnaire and a rating scale to be given to high-school students during the first week of a class that you teach. Ask your classmates and teachers, or high-school students, to appraise the items.
10. On the basis of your experiences in high school or college, describe the best and worst evaluation system you have known. What major factors led to the superiority of one and the inferiority of the other?
11. Contrast procedures used in daily evaluation with those for measuring progress over a period of time.

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PART III

Creative
Teaching-Learning
Activities:
More
Specific
Emphases

Two extremes in individual and group work are to be found in the classrooms of Miss Holland and Mr. Smith, who teach arithmetic in the eighth grade.

The students in Miss Holland's class work individually. She has worked out a contract with each student. Mimeographed assignments in arithmetic constitute the basic instructional materials. The assignments vary in complexity, starting with easy ones and progressing to difficult ones; they include materials at average achievement levels through several grades. Each student proceeds at his own rate in completing the assignments; by the fourth week of the semester most students are on different ones. Miss Holland helps her students individually. There are no problems designed for the whole group, and no whole-class discussions of specific skills and processes in mathematics.

All the students in Mr. Smith's class are working on a common problem—planning a personal budget. Mr. Smith led a whole-class discussion concerning the information and facts needed for this purpose. The class as a group decided on the form for the budget, and all the students worked together on problems involved in budget making as such. Each student secured the necessary information for making his budget, recorded it on the budget form, and made his computations. When individual budgeting was under way, the class formed committees to consider installment buying, checking and saving accounts, and the percentage of the total expenditures to be allotted for items like food, clothing, recreation, books, etc. The more proficient students led the committees and also helped the less proficient with the computing involved in completing their budgets. Mr. Smith spent most of his time discussing problems with the class and with committees. He helped individuals while working with the committees. He conducted no whole-class drills in arithmetic processes as such nor did he give any textbook assignment to the whole class.

Two college instructors observed the classes of these two teachers during the fourth week. One of them rated Miss Holland high because of the way she provided for individual differences in the individual assignment and contract plan. He rated Mr. Smith quite low because "Mr. Smith was

not teaching enough arithmetic fundamentals." The second instructor rated Mr. Smith very high because "the boys and girls were learning how to work together as well as to use arithmetic processes in making budgets—two very important skills which transfer to home life." He rated Miss Holland quite low, mainly because he felt that her class did not contribute as much to important school objectives as it might.

Which of these ratings do you agree with? You probably do not have enough information to come to a conclusion; perhaps you feel that both teachers should be rated in terms of their objectives and the relationship between these objectives and those of the school's total program. No decision should be made as to whether individual or group work is of more value except in terms of the objectives sought and the student achievement made possible. Some objectives require individual work; others require group activities.

Although certain classes stress either individual or group work more definitely as far as objectives are concerned, in most classes a careful balance of whole-class, small-group, and individualized activities is essential. The whole-class activities are needed principally to help each student feel that he is an accepted member of the group, to develop common goals with it, and to secure and share information with it. Small-group activities meet the varying abilities, interests, and needs of smaller groups within the total group, as well as achieving some of the objectives of whole-class activities. Individualized activities are essential if students are to develop certain skills and learn independent work and study methods, and if wide differences among the students are to be provided for. These three forms of activities will now be discussed, emphasis being given to specific methods of organizing and conducting them to achieve desirable results. In Part II on the developmental sequence of teaching we saw that the problem-solving, unit type of teaching incorporates all three.

WHOLE-CLASS ACTIVITIES ACHIEVE CERTAIN OBJECTIVES

As pointed out in Chapter 4, the class is a group and the teacher's understanding of its characteristics leads to more efficient learning by the students, not only of favorable attitudes but also of subject-matter understandings and skills. The more important values which can be secured by the balanced use of whole-class activities include developing a feeling of belongingness on the part of all the students, establishing group goals,

securing and sharing information with the entire group, practicing communication skills, and formulating codes of group conduct. Some of these can also be attained in small-group activities, but none are so readily achieved in purely individual activities. The objectives attainable with whole-class activities will become more apparent in our subsequent analysis of whole-class discussion and projects, sound films and records, field trips, question-and-answer recitation, and lectures. While each of these, particularly the first two, may be used with groups smaller than the whole class, they are most common with the whole class.

WHOLE-CLASS DISCUSSION

Frequently, a whole class operating first as a unit and then in smaller groups can secure more information than students can working individually. Obtaining information to get an activity under way, to arrive at conclusions, or to formulate generalizations is an important part of school learning. Furthermore, participating in whole-class discussion may give students a feeling of belonging and improve such communication skills as listening and speaking.

In a tenth-grade history class, for example, the teacher and students consider keeping up with world events a worth-while educational activity. The teacher leads an informal class discussion of how such information will be obtained, how it will be presented to the whole class, how much time will be devoted to it each week, and how it is related to the study of history. The class decides to divide the world into major geographical subdivisions. Each student lists the three regions in which he is most interested. On the basis of these choices, six committees are formed. Each committee is responsible for posting pertinent information about a particular region on a designated area of the study display each week. Every Friday the whole class discusses the display, and one or two members of each committee give the class a verbal description of the more significant events in an area. Whenever a student on another area committee finds material not included in the report, he presents it himself.

Had there been no opportunity for the students to discuss the problem, methods of securing materials, sources of information, and quality of the graphic and oral presentation to be made each Friday, the interest of the class and the amount of information would have decreased considerably. The teacher, of course, had considered this project very carefully and

stimulated student participation in the discussion by asking significant and thought-provoking questions such as "How is history being made today?" "How can we as a class obtain a better understanding of current world events?" "How can we keep everyone in class informed of what our committees discover?"

Informal class discussion does not usually occur spontaneously. Stu-
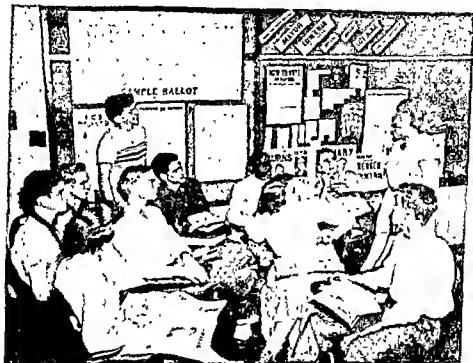
Fig. 10.1. With what aspects of discussion does a group like this need help from the teacher? (Fort Wayne, Indiana, Public Schools.)

dents do not progress in discussion techniques without teacher direction and guidance and without consideration of effective discussion techniques. To get a discussion started, the teacher asks thought-provoking questions that are related to the subject under investigation. To assure student progress, he helps students appraise the relevance and importance of contributions, their expression, and the respect shown to other students' ideas (Fig. 10.1). In an informal class discussion the students should observe the following principles:

1. Be acknowledged by the chairman or teacher before speaking.
2. Make sure that your statements are related to the problem.
3. Be courteous and respect the rights of others.
4. Word your questions carefully and clearly.
5. Speak clearly so that everyone hears.
6. Listen attentively to the speakers.
7. Participate in the discussion but do not monopolize it.
8. Defend your statements and ideas when they are supported by facts but avoid arguing.
9. Take part in a discussion, expecting to learn from your classmates.
10. Recognize that most problems of living together are solved by groups of people who are trying to work them out together.
11. Make notes of new points and those you disagree with.
12. Take the responsibility for summarizing a discussion when you feel it will help the whole group to think more clearly.

Usually a circular or semicircular seating arrangement is best for keeping the attention of the whole group on the discussion. Requiring students to stand up when they speak impedes rather than facilitates discussion. It is wise, however, if a group has ten or more members, for a student chairman or the teacher to recognize the student who wishes to speak.

WHOLE-CLASS PROJECTS

In the preceding section, reporting current events each Friday was a whole-class project. In the units in Chapters 7 and 8, the whole-class project in English was the school assembly program; in the science unit it was a display for the PTA; in the square-dance unit it was an exhibition during intermission at a school dance, and in the music appreciation unit it was a daily "concert" hour for the teaching staff. This variety of projects and other activities engaged in by classroom groups, including painting murals, decorating the classroom, writing a history of the locality, and making study displays, suggest their wide appeal to adolescents and also their value in creating feelings of belongingness and importance in the group.

Not all projects are entirely successful. Sometimes the difficulty lies in the leadership, other times, in the characteristics of the group and its members. For a project to be successful, the teacher must make sure that the students consider it worth while, he must assist them in planning but

without dominating, and he must supervise closely enough throughout to make certain that the various students are doing what they should be doing (Fig. 10.2). Whole-class discussions are needed to enable the students to secure necessary information and also to learn how to accept responsibility. In many cases, small-group projects are planned first, rather than the whole-class activity. Many classes have bright students who prefer to work individually; the teacher can usually find appropriate work for them in connection with the whole-group project. However, it should not be necessary for such a student to spend a great deal of time with either the whole group or the smaller group, for he can become a very disruptive influence.

SOUND FILMS, RECORDS, RADIO, AND TELEVISION

As will be seen in the next chapter, sound motion pictures and phonograph records are used widely with whole-class groups, and television is being used increasingly. These media at the present time are used primarily with classroom groups; that is, a sound motion picture is usually shown to the whole class rather than to small groups in the class. Although these presentations have some value, it is the preparation for them and

Fig. 10.2. This student group is working on a poultry project; another group is concerned with a larger project—building a house. What is needed to make a whole-class project successful? (Hillsborough County, Florida, Public Schools)

the follow-up discussions and other activities that make them particularly worth while. The motion-picture and television programs produced for school use are generally attention-getting and interest-holding, and hence offer considerable opportunity for making learning activities meaningful to a whole group.

FIELD TRIPS

One of the better methods for securing information about the geography, history, public health, recreational facilities, vocational opportunities, governmental services, music, and art of a given community is

Fig. 10.3. Field trips and community surveys are widely used. What plans should be made before such a trip? (Pittsburgh, Pennsylvania, Public Schools.)

provided by field trips. Field trips are usually made by the entire class in order to provide for adequate teacher supervision. However, students who become vitally interested in a problem may make field trips outside of school hours and assume responsibility for their own conduct. Today throughout the nation, high-school students are making long-term community surveys that involve traveling thousands of miles. Such trips are generally considered to be of significant value in building better understanding of the community, developing student responsibility for his own actions, and bringing school and community programs into closer relationship.

Unless field trips are carefully planned and executed, little purposeful learning will occur; moreover, they may lead to serious misunderstanding between school and community. When repeated field trips are undertaken, as in making a community survey, the plans involving the people in the community should be given special emphasis.

In planning a field trip, the teacher should give careful consideration to its probable educational values; he should also make the necessary arrangements with the person or groups at the place being visited, arrange for transportation, consult the school principal concerning the trip, talk to the students regarding their conduct and the information to be secured. This latter aspect needs further clarification.

If students are to obtain certain information on a field trip, the desired information must be related to their class work. A teacher-led class discussion may be held in which the need for the trip is established, the class is oriented to the situation, a series of questions to be answered is listed, a system of recording information during the trip or immediately thereafter is outlined, and a procedure for appraising the information is formulated. The last step is frequently overlooked, but it is extremely important because students will look for and record information more efficiently when they know how it will be appraised (Fig. 10.3).

A teacher-led discussion is effective in regard to student conduct on field trips. If students are unwilling or unable to exercise the control and judgment in the classroom that are necessary in formulating reasonably adequate standards of conduct, it is likely that the field trip will be hazardous for everyone concerned. Further, if specific procedures have not been carefully worked out with the person in charge of whatever is being visited, the best-behaved students will profit little from the trip.

QUESTION-AND-ANSWER RECITATION

A teaching-learning procedure which still persists is question-and-answer recitation. The teacher assigns textbook passages to be read or problems to be worked during the study period. When it ends, he asks questions about the work. His major purpose in questioning is to discover the extent to which students know the correct answers called for by the assignment. It is not uncommon to find teachers devoting half of the instruction period to rapid-fire, factual-type questions to be answered by the students.

Some of the major weaknesses of this method should be examined. It usually fails to create a favorable feeling between teacher and students because the class regards the teacher as an inquisitor rather than a helper. It frequently creates friction on the part of the students because, however tactful the teacher may be, his approval necessarily is given for correct responses; incorrect responses elicit his disapproval. Furthermore, this technique is of little if any use in building democratic attitudes and values; on the contrary, it is likely to promote highly individualistic, competitive attitudes. It is very inefficient in developing interaction in oral discussion and attentive listening; in reality, many teachers resort to such devices as marking, arbitrary seating arrangements, rewards, punishments, and the like to get students to recite or pay attention in class. The procedure is not conducive to acquiring problem-solving attitudes or skills; the main problem confronting the students is to give the answer the teacher wants or the one that is in the book. Finally, students do not learn self-appraisal techniques because the teacher does most if not all of the appraising.

However, the question-and-answer recitation has some values if not overused (Fig. 10.4). Some students may learn the correct answer from the pupil reciting. A student who knows the answer already (this tech-

nique will not be successful if no one knows the answer) may remember it longer because of having given it orally. A student may study the assignment more carefully because he knows that he may be asked for some answers during a twenty-minute recitation period. Some of these values may be achieved when a short, fast-moving review of such factual material as foreign-language vocabulary, the plot of a story, and mathematical processes are handled in question-and-answer recitation. Supervised study may be employed to achieve these values more efficiently and other important educational objectives as well.

LECTURES

Fig. 10-4. When is question-and-answer recitation useful to a good learning situation? When is it detrimental? (Chicago, Illinois, Public Schools.)

Lectures may be used judiciously to introduce a topic or unit, summarize important information not readily available to the class elsewhere, clarify discussions, explain a process, express a point of view, and summarize ideas or progress. There is probably no class in which lecturing should be used exclusively or even as the major instructional technique, but there are many in which short explanations serve many useful purposes.

Some of the more important objections to the wide use of lecturing in high-school classes are based on the psychological fact that learning is an active, not a passive, process. Lecturing is uninteresting to some of the students in almost any class. It gives the class little opportunity for problem-solving activities and for the exercise of initiative, and no opportunity to develop communication skills. Lecturing thwarts the exploratory aspect of learning because the students are supposed to accept the reliability of the information thus presented. Unless the teacher selects his terminology very carefully, many students will not understand what he is talking about. Lectures are invariably ineffective when the material is of no interest to the students, when the context is not meaningful, and when they are given too frequently or are monotonous.

Lecturing may be improved by careful planning that includes the following steps: (1) Consider the instructional objectives to be achieved; (2) consider the material from the students' point of view; (3) use concrete illustrative materials and demonstrations; (4) outline important parts of the material on the chalkboard; and (5) talk fluently and clearly without referring frequently to notes or actually reading the material. Furthermore a teacher can usually get better results by lecturing only during part of the class period. The remaining time can be spent in whole-class discussion or small-group work, the students being encouraged to ask questions and to offer additional information.

SOME OBJECTIVES REQUIRE SMALL-GROUP ACTIVITIES

Small-group activities are necessary in many cases to meet the varying abilities, interests, and needs of smaller groups in the class. This is especially true in subjects required of all the students in a grade—for example, in English and social studies, both of which are required of juniors. Moreover, the wider the range of abilities and interests in the class, the greater the need for small groups unless individual activities can be arranged.

BASES OF SMALL-GROUP FORMATION

There are several bases for forming small groups. Depending upon the outcomes desired, the chief bases are the mechanical, friendship, interest, achievement level, and differential ability.

Mechanical grouping is often used to help students get acquainted and to encourage them to work coöperatively with all the class. In forming these groups, the teacher may use the letters of the alphabet with which the student names begin or the rows in which their seats are located; he may also have the students count off, as is done in the armed forces.

Friendship grouping is used to get students to work together efficiently as quickly as possible or to deal with cliques as groups. Friends do not need time to get acquainted and, having already worked together in school, home, or neighborhood, they can get started quickly. As suggested in Chapter 7, it is probably better to keep members of cliques together at first than to distribute them among several groups, for clique members can disrupt small-group efforts.

Interest grouping is widely used in unit teaching (Fig. 10.5). When a larger project or culminating activity is planned, smaller projects and

other activities are identified, and the students volunteer for them on the basis of interest. Interest grouping is found not only in a class but also in the entire school's program. Student selection of tracks or programs, elective subjects, and cocurricular activities is based on interest, although other factors, including friendship and ability, of course enter in. There is probably no better way of getting a working group formed than to have students identify and intensify an interest themselves and then explore it fully with other students.

Achievement-level grouping is widely used in modern elementary schools and much more of it is needed in Grades 7–12, particularly in the required courses. In this type of grouping, each student's achievement level in the particular area of achievement is identified. Thus, where achievement in reading, mathematics, or science is closely related to learning efficiently in any class,

Fig. 10-5. On what bases might groups such as these be formed within the classroom? When would grouping on the basis of interest be best? (Top, School District of the City of Berkley, Michigan; lower, Cleveland, Ohio, Board of Education.)

the students are grouped on the basis of their achievement level and go from one to another group as necessary. This may mean from two to five groups within a class. In eighth-grade arithmetic, for example, there might be three groups—low achievers, middle achievers, and high achievers. When reading is an important means of acquiring information as in English, social studies, or science, groups are formed on the basis of

achievement level in reading, and reading materials and instructional activities are varied as necessary for the various groups.

Differential-ability grouping enables a teacher to have students who differ in ability in each of several smaller groups. For example, in an American history class five committees are formed to secure and present information on federal support of education during each of the last five government administrations. The teacher wants each committee to include a student who can lead discussions well and get the group going in the desired direction, another student who reads and writes well and knows how to use the library well, and still another student who can visualize information well. Each committee will also include two or three students who cannot do any of these things particularly well but need to learn. Knowing the students' differential abilities, the teacher organizes the committees on this basis and obtains the desired results.

FORMS OF SMALL-GROUP ACTIVITIES

Of the many forms of small-group activities, only the study of text and references, British-style debate, panel discussion and reporting, and sociodrama and informal role playing are discussed.

The Study of Text and Reference Materials

When students show considerable range in ability to use a basic text, small-group work may be used to good advantage. For example, students in a geometry class are divided into groups of three or four who vary sharply in ability. The teacher assigns each group a number of problems to solve, perhaps the same for each group. The students do the assignment together, using the chalkboard and other available materials. The same procedure can be used in foreign-language, science, or English composition classes when the basic text can serve as the basis of daily work assignments.

In such classes as social studies and literature, where the basic text is organized in units each of which contains several chapters, the class is frequently divided into groups to work on specific chapters. This enables considerable information to be obtained in a relatively short time. Various types of oral, written, and graphic presentation are used for group reports to the class.

In studying a topic which requires reference books and current printed

information to be consulted, groups are frequently organized within the class for this purpose (Fig. 10.6). Each group assumes responsibility for investigating one aspect of a topic or one type of source material.

The chief criticisms of having students work together on an assignment are that better students are held back by slower ones, most of the work is done by one student, the group does not learn how to study and work individually, and the classroom is noisy. All these conditions are present when group work is poorly organized. They can be avoided if there is sufficient teacher-student planning so that the students recognize their responsibility to their group and to the class for doing a fair portion of the work, share in deciding what to do and how to do it, decide on rules of conduct for group work, and devise techniques for appraising individual contributions to the group and those of the group to the class. Whether the better students should help the slower cannot be answered dogmatically. However, civilized group life is based on the assumption that the strong will help the weak; anarchy flourishes when group life is based on the survival of the fittest.

Fig. 10.6. Group activity facilitates the gathering of information. What are the main problems encountered in small-group work? (Madison, Wisconsin, Public Schools.)

When two sections of the same class are relatively equal in achievement (this may be ascertained by comparing the initial test scores), the teacher should discover the relative merits of small-group work. This may be done by giving an achievement test at the beginning of a reporting period. During the period whole-class activities are used in one section and group work in the other; the other factors—films used, discussions, explanations made by the teacher, etc.—are held constant. The test is repeated at the end of the period. The scores made by the two sections are compared, the teacher noting especially the average or mean score, the range in scores, and the amount of progress made by the students scoring highest and lowest. Also at the end of the period the teacher has the students in each group demon-

strate their ability to work together in planning such activities as a class party or a field trip, their effectiveness here also being evaluated.

British-Style Debate

The British-style debate, based on House of Commons procedures, brings the audience into the debate. A problem is formulated and a speaker for the affirmative and one for the negative make a five- to eight-minute formal presentation. A second member from each side then gives a shorter talk; these two speakers may yield to a question or a contribution from the floor or audience. This is followed by an open period in which the floor may speak or ask questions of a debater or of someone in the audience who has already spoken. These speeches however must be in affirmative-negative sequence so that an equal number of people speak on each side of the question. A speaker from each side then makes a summary presentation, after which members of the audience may again speak.

For eliciting audience interest, participation, and identification with the problem, the British type of debate is far superior to the more formal style. An interesting way to adapt this type of debate to classroom use is to limit debate to half the period and use the remaining time for whole-class or small-group discussion of what has been said.

Panel Discussion and Reporting

A class may be organized into panels—that is, groups of from four to eight members—to secure and discuss information and then to present

Fig. 10.7. What objectives may be reached by means of panel discussions and reports? How much help do students need in preparing for a panel report? (Dallas, Texas, Independent School District.)
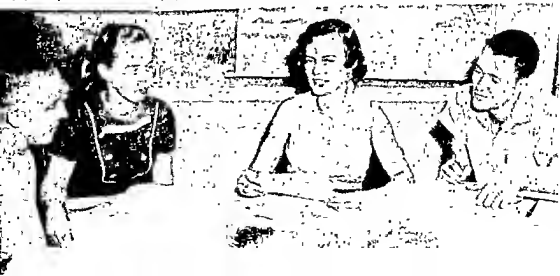
facts, generalizations, and conclusions to the rest of the class (Fig. 10.7). In one form of panel discussion each student makes a short formal presentation related to the subject under investigation. In another form, the chairman states the topic, and the panel members then respond informally. With this latter procedure, the students speak only from notes and make more contributions to the discussion.

The chairman of the panel has much of the responsibility for its success. If a class is unfamiliar with panel procedures, it is advisable for the teacher to act as chairman of the first panel. Here are the main jobs he should do in planning a panel:

1. Have the topic discussed sufficiently by the whole class to make sure that the students understand it clearly and are interested in getting and presenting information.
2. Help the students to organize into panel groups and to select a chairman to guide the panel in securing information.
3. Help the chairman and group members to allot responsibility for securing information and devising graphic aids and demonstrations for its presentation.
4. Aid the class to devise forms for recording information.
5. Help the students to develop a conversational style in committee meetings.
6. Assist the chairman and students to draw up a presentation plan based on each member's specific responsibility for an area of information.
7. Help the chairman to plan his presentation, including:
   a. A clear statement of the topic and brief introductory remarks about it.
   b. Introduction of the panel members and the special area of each member.
   c. Statement of the first question to be responded to by a panel member.
   d. A method for accepting questions from the floor.
   e. A method for bringing each panel member into the discussion.
   f. A method for summarizing when needed.
   g. A method for keeping the remarks focused on the topic.
   h. The closing remarks.

8. Work out with the entire class techniques for evaluating the panel in relation to:
   a. Clarity of the discussion.
   b. Relevance of materials presented.
   c. Effectiveness of presentation of the individual students.
   d. The chairman's effectiveness.
   e. The conduct of the audience.
   f. The appropriateness of the contributions from the floor.

Tape recordings of a panel discussion are excellent evaluation devices.

Sociodrama and Informal Role Playing

Sociodrama is unrehearsed dramatization dealing with social problems. In it students play various roles using only the information they already have concerning how the role should be played, there is no script, no rehearsing, and no memorizing of lines. Sociodramatic presentations are generally based on informal class discussions about social problems. However, this technique may be adapted to a variety of situations, in which case it is called informal role playing.

A class decides to give a party that is not on the school's crowded social calendar. Someone from the class must secure the approval of the girls' adviser. What should the student say to the adviser? The teacher discusses the situation briefly with the class. The class says that the student could approach the adviser timidly, aggressively, or in a straightforward, courteous manner. The teacher's desk and chair will represent the adviser's office. One student volunteers to act as the adviser; other students play the other roles. Each of the latter steps outside the classroom for a minute to decide on how to play his part; the other students are asked to watch the role playing. The situation is then dramatized. When a student suggests how a role might be portrayed more effectively, the teacher asks him to take the role; this replacement is frequent in groups that are accustomed to sociodrama. Following the sociodrama there is general class discussion, with one student being selected to secure the adviser's approval for the party.

Here are situations similar to the one just described in which role playing works well: an applicant for a job interviews an employer, a student seeks information from someone in the community, a salesman talks

Fig. 10.8. What objectives may be achieved in informal role playing and sociodrama? (Chicago, Illinois, Public Schools.)

to a customer, a boy asks a girl for a date, a high-school sophomore secures her parent's permission to attend her first school dance, a student discusses a test score or semester mark with his teacher, and a student introduces a teacher to his parents. Playing shy, aggressive, and well-mannered roles gives all these situations reality and helps the students learn the preferred way. It goes without saying that students who can play the preferred role easily in the presence of their teacher and classmates will meet actual situations with greater ease and confidence.

After a class has studied a short story, novel, drama, or historical event, a climactic situation which involves the leading characters is identified. The situation is discussed briefly, the setting is arranged; and students are selected for the various roles. Each student while playing the role indicates his attitudes toward the character, his understanding of it, and his information about the plot. The audience also have ideas about how the roles should be played and knowledge about the plot. Thus informal role playing and sociodrama hold the students' interest (Fig. 10.8).

These suggestions may prove useful in organizing and directing informal role playing and sociodrama the first time:

1. Select a situation that the class understands well. Generally, such situations arise in informal discussions of the topic being studied.

2. Allow sufficient time in setting up the situation so that the setting and the roles are understood by all the class.

3. Emphasize the fact that the student is playing a role not portraying his own feelings and attitudes; he is not supposed to act as he really feels about the situation.

4. Attempt to get students to volunteer for all the roles; in case none do, select students who you know are not shy or easily upset.

5. Prepare the audience for observing. An effective technique is to

say simply: "Notice how Mary and John play their roles. If you would do differently, you will have a chance after they finish. Treat Mary and John as you want them to treat you when you play the role."

6. Stop a student when he steps out of the role or cannot carry it on. Some students volunteer in an attempt to overcome their feelings of insecurity with braggadocio but become inadequate and sometimes helpless in the situation.

7. Get other students to play the roles after the first group has finished.

8. Expect students to be considerably nervous when playing a role for the first time.

9. Summarize role-playing presentations in a short class discussion when this is feasible.

Some of the more important values derived by the students from informal role playing and sociodrama include great interest, complete attention to the presentation, better understanding of attitudes toward a given problem, deeper insight into a social problem, more careful preparation of materials which may be dramatized, definite increase in communication skills, and a high degree of transfer of learning to the actual situation being dramatized.

In summarizing small-group activities, the methods of grouping and the forms the work may take are the principal responsibility of the teacher. Some objectives can be achieved better by small-group than whole-class activities. The relative amount of whole-class, small-group, and individual work that is desirable in a particular class depends mainly upon the type of learnings to be acquired, the characteristics of the students, the competence and attitudes of the teacher, and the overall emphasis in the curriculum and in administrative policy.

INDIVIDUAL ACTIVITY IS ESSENTIAL FOR LEARNING

As suggested in Chapter 2, the acquisition of understandings and independent skills requires individual activity. Whole-class and small-group activities are useful in achieving certain objectives, but they should not be thought of as replacing individual work and effort. The group activities discussed above attain the desired outcomes through the interaction of individuals, which in turn means that individuals must contribute to the group effort.

Of the many forms of class activities that are focused on individual study or practice, the three most widely used are (1) supervised study and individual projects, (2) library work, and (3) laboratory work.

These three are particularly needed in acquiring skills, such as reading, writing, mathematics, swimming, instrumental music, and the like; doing independent study and formulating desirable attitudes toward individual effort and performance; satisfying the need for mastery over things, including subject matter; and providing for differences among students. Special individual methods of instruction such as tutoring, the Dalton and other contract plans, and the Morrison mastery method are not used widely because of their limitations for use in large classes. For this reason they are not included in the following discussion; however, information about them is available in most libraries.

SUPERVISED STUDY AND INDIVIDUAL PROJECTS

In a supervised study period the students work on teacher-made assignments, student-initiated activities, and individual projects of many kinds. The teacher helps each student with his work. In many classrooms half, and sometimes more than half, of the instructional period is used for supervised study; the remainder, for discussion, explanation, and the like. Sometimes supervised study is called directed study; the two terms are used synonymously in this discussion.

Supervised study has proved to be one of the better teaching techniques, for it provides for individual differences and at the same time helps students acquire individual skills and work methods. Because many students apparently profit little from homework, the supervised study period has gained in favor, and various methods of making assignments in supervised study have been devised to fit the characteristics of different groups (Fig. 10.9).

The Common Assignment

In classes where the level of student achievement is relatively equal, a common assignment may be given to the class. Frequently when silent reading is part of the assignment, the teacher provides the students with a list of questions or study guides, either mimeographed or written on the board. As individual students encounter difficulties, the teacher helps them. This help should be both diagnostic and evaluative in nature so
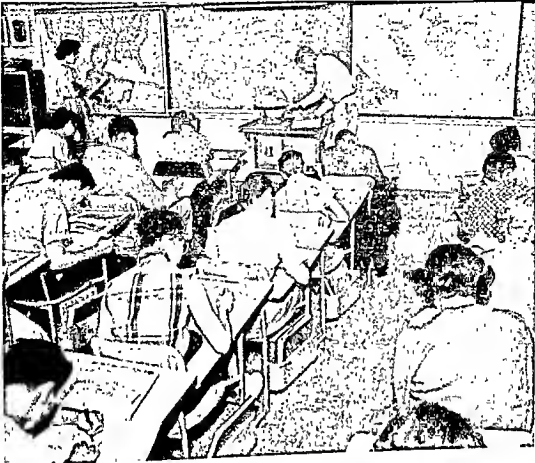
Fig. 10-9. These situations illustrate the widespread use of part of the class period for supervised study and individual projects. (Top, Los Angeles, California, City Board of Education; lower, School District of the City of Berkley, Michigan.)

that the difficulties are identified and methods of overcoming them are devised. Merely giving correct solutions is poor practice.

Carefully directed common assignments may be useful in teaching students to read charts and maps, get the meaning from paragraphs, identify key ideas in an assignment, identify unfamiliar words, organize a complete assignment into a meaningful pattern, and practice on skills.

The Achievement-Level Assignment

At the beginning of a unit or class in such areas as English and arithmetic, the students can be expected to vary considerably in level of achievement. Hence the teacher first determines each student's achievement level and then divides the class into two or more groups. Finally he sets up a supervised study period that is the same length for the entire class. The assignment to each group in arithmetic, for example, may consist of problems involving percentage, ratio, or fractions—whatever skill is being studied. But these assignments vary in difficulty and in type. Thus, for the low achievers, the problems are stated very simply and deal with concrete situations, whereas those for the advanced students are more abstract and difficult.

In a unit in American literature the same general ideas hold true. Thus the slower-learning students are assigned easily read, easily understood, and relatively shorter selections, whereas the more advanced have essays, plays, novels, and longer poems. There may be a common core of readings for all the students to provide the background for whole-class discussion and dramatization. This core should be selected for the average reading achievement level, in the knowledge that the faster students will have other challenging activities and that the slow learners will need considerable help from the teacher.

As may readily be surmised, the teacher's task in organizing assignments at three or four levels of difficulty and still providing a core of common activities in which the whole class participates is both time-consuming and difficult. It requires thorough familiarity with the characteristics of the students and also with the materials. In making achievement-level assignments the teacher uses his best estimate of the achievement level of the various students. However, unless they complete most of the assignments, this procedure will not prove of value.

Some teachers prefer to make flexible, individual assignments which make the students themselves responsible for choosing from among various activities in accordance with their interests and abilities.

To be effective, the flexible assignment must incorporate a broad range of activities and must provide for student initiative to operate in selecting them. An achievement-level assignment in a unit in American literature might require the better students to read a novel, two short stories, two poems, an essay, and a modern play. The teacher who uses the flexible assignment presents a list of novels, short stories, poems, essays, and modern plays; the students may suggest others. Each student then makes his selection and reads as many as he can. During the supervised study period the teacher helps his students to improve their method of attack in reading a particular type of literature, in discovering means of getting the main ideas, in using reference materials, and the like. A *minimum core of assignments may be required from all students.*

All the above illustrations of supervised study are taken from separate-subjects classes. *The supervised study technique was devised at the time when the separate-subjects curriculum and individual development were being stressed in secondary education. Supervised study involving individual projects and practice is still effective in separate-subjects courses, and when used well, it individualizes instruction to meet the varying needs and interests of students.*

LIBRARY WORK

The modern school library is a place to read, to listen to recordings with earphones, to study and work at tables; it is not a place for visiting and doing group work. With the variety of newspapers, current periodicals, books, and supplementary materials of many kinds it provides, the school library can meet the needs of individual learners advantageously (Fig. 10.10). It is particularly valuable for students who learn easily through reading.

Most schools have good collections of records with the necessary sound equipment, including earphones, so that individual students may listen to them without interfering with other pupils who are studying. This

Fig. 10.10. No modern resource meets the needs of individual students, including the gifted, better than the library. (Cincinnati, Ohio, Public Schools.)

equipment may be kept in the library, as well as in some other room. The student who does not find reading a play or discussing a printed speech very meaningful may gain greatly from listening to a recording of it.

If students use the public library outside school hours, they need to learn to use it intelligently during school hours. More information on the use of libraries, both school and public, is presented in Chapter 12.

LABORATORY WORK

Laboratory work was strongly emphasized in the 1920's and 1930's. This emphasis decreased later, as group work and group projects came to the fore, but the recent need for more engineers and scieotists

has revived the interest in it. Throughout this entire period, however, certain areas of instruction—home economics, agriculture, various fields in vocational education, business education, and the sciences at the senior high-school level—continued to stress the need for doing, seeing, and thinking, not merely reading, talking, and thinking, if students are to learn efficiently. More classes in more subject-matter fields can and probably should include laboratory-type individual activities, at the same time providing for a variety of whole-class and small-group activities (Fig. 10.11).

A good laboratory has facilities and space for students to "do things" in addition to sitting, reading, or talking. There are tables, counters, the necessary materials. The chairs are movable as are also the sinks or tables except those with water, gas, and electric connections. Whether for science or English, a classroom can be arranged for

Fig. 10.11. The values of laboratory work have been demonstrated in the areas shown in these pictures. Why should it be given greater emphasis in such fields as social studies, English, and mathematics? (Top, Milwaukee, Wisconsin, Public Schools; lower, Los Angeles, California, City Board of Education.

laboratory-type activities unless it is too small for the number of students. Students in the English class would probably profit as much from examining materials, reconstructing plots on the chalkboard, taking the part of characters for the tape recorder, and manipulating punctuation marks on glass slides as students in biology and cooking do. Many students with little interest in reading, listening, and talking might become

greatly interested in a variety of laboratory-type activities—doing, manipulating activities.

SUMMARY

Whole-class, small-group, and individual activities are organized to help students become competent and socially-conscious people who operate efficiently as group members and as individuals. No one activity is superior to another in all cases; instead, there must be a careful balance among whole-class, small-group, and individual work.

Of the whole-class activities, informal discussion, sound motion-picture films, recordings, television, and field trips appear to meet adolescent needs better than lectures and question-and-answer recitations. Each of the latter is good for certain purposes if not relied upon too heavily and if used intelligently. Well-conducted whole-class activities are often needed to help each student feel that he is an accepted, worth-while member of the class, to help the group develop common goals, and to help the class coöperate in obtaining and sharing information with one another. Planning small-group activities typically begins with whole-class discussion; the specific projects often originate when students read the same material, go on a field trip, or watch a sound film or television program.

Small-group activities are required if the varying interests, abilities, and needs of smaller groups within the class are to be met. Such groups are usually organized on the basis of seating arrangement or alphabet, friendship, interest, level of achievement in the particular subject matter, or differential ability to insure a range of abilities within each group. Four of many activities in which small groups participate are the studying of text and reference materials, British-style debate, panel discussion and reporting, and sociodrama and informal role playing. Individual contributions by the various members are necessary for success in both whole-class and small-group activities.

Individual activities are essential for developing individual skills, independent study and work methods, and desirable attitudes toward individual effort and performance; satisfying the adolescent's need for mastery over things; and providing for wide individual differences among students. Supervised study and individual projects, library work, and laboratory work are among the most important means of individualizing

instruction. The supervised or directed study period during the regular class period is widely used to assist students, by means of independent study and practice, to reach their maximum achievement.

Questions and Activities

1. Indicate which of several important learning outcomes related to your area of teaching could be achieved through whole-class, small-group, and individual activities. How could this be done?
2. Describe briefly a situation in which you would use a whole-class discussion. A whole-class project. A sound film. A field trip. A question-and-answer recitation. A lecture. What purposes would you wish to achieve in each case?
3. On the basis of your own experiences, state briefly why some whole-class activities fail and others are successful.
4. Describe a situation in which you would organize a class into small groups on each of these bases: mechanical, friendship, interest, achievement level, differential ability.
5. In what type of situation would small-group study of an assignment be likely to fail? To succeed?
6. What are the principal values of sociodrama and other informal role playing?
7. Set up a sociodrama in which one person takes the role of an administrator who strongly favors whole-class activities, another, the role of one who favors small-group activities, a third, the role of one who favors individual activities, and a fourth, the role of an inexperienced teacher seeking information.
8. When would you use a common assignment? An achievement-level assignment? A flexible, individual assignment?
9. Give the title of a unit in your subject-matter area, and indicate how the library might be used by the students.
10. How could your classroom be set up as a laboratory-type room? What activities might then be possible?
11. Indicate, in relation to your subject field, the desirable balance of individual, whole-class, and small-group activities during part of the class period.

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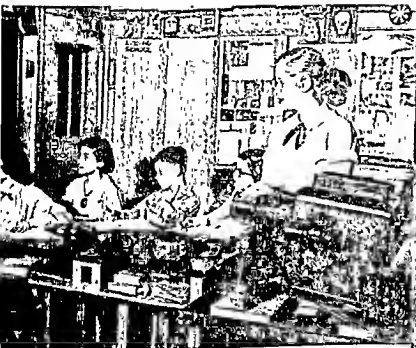
Using Audio-Visual Materials

Visit several classes in a modern school and you will note the variety of visual materials: flat pictures, graphic materials, globes, chalkboards, three-dimensional materials, current reading matter, and study displays. Tape recorders, radios, and recordings are also in evidence. In classrooms with shades drawn, students are seeing 16mm. sound motion pictures and television programs. The pupils in this school are seeing and hearing, looking and listening.

How important are audio-visual materials in learning? Visiting a school for the blind and partially seeing demonstrates the importance of hearing in learning. Similarly, a day spent in a classroom for the deaf and partially hearing demonstrates the importance of visual materials. Observing young children suggests that direct sensory experiences—seeing, hearing, touching, tasting, and smelling—are the basis for the subsequent development of abstractions, of the words and other symbols that convey meaning.

Many students in Grades 7–12 cannot get sufficient meaning from reading alone or have inadequate direct experiences with many concepts, skills, and attitudes to learn as efficiently as they could with audio-visual instructional materials. All these students can learn certain concepts, skills, and processes better when visualized than through reading and discussing alone. Audio-visual materials, however, should not be considered as replacing the teacher's face-to-face leadership of learning activities, students' independent reading and direct experiencing, small-group and whole-class discussions, problem solving, and undisturbed reflective thinking.

Audio-visual materials and their use may be considered in relation to four principles:

1. Visual materials enhance meaningful learning.
2. Audio materials enhance meaningful learning.
3. The sound motion-picture and television combine meaningful sensory experiences.
4. Audio-visual materials must be used intelligently.

VISUAL MATERIALS ENHANCE MEANINGFUL LEARNING

A significant advance in the effectiveness of classroom instruction has resulted from the widespread use of visual aids to learning. Reading printed materials, which some authorities classify under visual education, and listening to discussions and explanations are more interesting when supplemented with visual aids because events, concepts, and processes become more meaningful to the student the more familiar he is with the background information. Visual aids help him understand what the printed or spoken words attempt to describe. Such aids are used for a variety of purposes, such as the following:

1. To provide visual presentations of events, concepts, or processes which often cannot be studied first-hand or be understood very well by reading and listening about it, e.g., a meeting of the United Nations Security Council, the metamorphosis of the fruit fly, the functioning of the human reproductive system.

2. To promote interest in subject matter to the point that students feel a definite desire for further study.

3. To help pupils understand concepts and processes that are extremely important in their daily living.

4. To promote retention because facts and information are retained better when they are presented to the student in different settings.

5. To introduce variety into teaching; this in itself stimulates zest for learning and discourages boredom.

6. To save time, for both teacher and students, because some material can be learned more quickly visually than in any other way.

Visual aids vary in their usefulness in achieving these purposes; hence they must be selected in terms of the desired learning outcomes.

FLAT PICTURES, CARTOONS, POSTERS

Taking pictures is becoming increasingly important as a hobby. The demand for professional photographers increases as the appropriate use of flat pictures makes newspapers, magazines, and books more meaningful to their readers.

What characteristics of flat pictures make their use so widespread both for the above purposes and also in teaching-learning situations? They are relatively inexpensive, present real-life ideas and impressions, and

cover a wide range of subjects. Good pictures convey meanings which often cannot be expressed in words, they present unfamiliar and novel phenomena to the viewer, they attract and hold interest. A combined pictorial-verbal presentation, clarified through classroom discussion if necessary, is one of the best interest-getting techniques in teaching. A 5 x 8 flat picture cannot be seen well by the entire class, but it can be looked at and studied by individuals and small groups. Moreover, pictures can be kept for reuse from year to year.
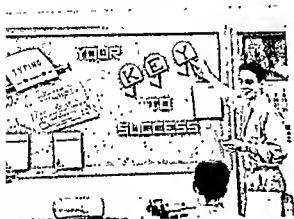
Fig. 11.1. What do flat pictures such as these suggest about the use of posters and flat pictures in the classroom? (Top, Monona Grove, Wisconsin, High School; lower, Pittsburgh, Pennsylvania, Public Schools.)

In view of the decreasing cost of producing colored pictures, it is doubtful that any visual material can be more versatile than the flat picture. The increased interest in picture taking and the excellent photographs available in magazines such as *Life*, *Holiday*, and *National Geographic* provide the teacher and his class with good pictures which can make classroom activities more meaningful to many students. Usually the teacher must initiate and also control the use of pictures if they are to fulfill sound educational objectives.

Cartoons and posters may be either secured from outside sources or made by the teacher and students. Comics and cartoons have high interest appeal for adolescents. Here also the teacher must be responsible for their use. Cartoons showing the struggle between labor and management, posters relating to various vocational fields, caricatures illustrating social graces—these suggest a few of the many excellent uses of cartoons and posters. Securing needed facts for authentic presentations encourages purposeful learning. In attempting to make a poster or cartoon, the students may become

bogged down with details; however, this tendency may be corrected.

A prospective teacher who collects visual materials and becomes skilled in displaying and using them while in college will find many uses for them in his first teaching position. Dark and colorless classrooms may be made interesting and colorful at very low cost.

GRAPHS

Bar graphs, line graphs, and circle graphs are used to summarize detailed information. The information may then be placed on a slide for projection or the original graph may be projected in appropriate size and color.
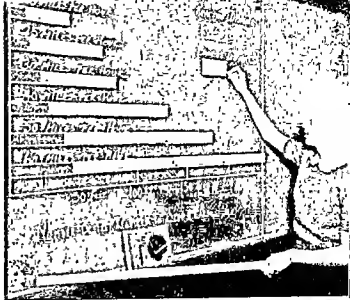
Fig. 11.2. Why is this graph better than explaining or lecturing in helping students interpret information? (St. Louis, Missouri, Public Schools)

In addition to being easy to make, a bar graph is especially useful for presenting such facts as school population each decade since 1890, number of automobile accidents in the community in each of the past ten years, and the cost of a given item of clothing during each of the last ten years. For any information that can be presented in a series of ratios, the bar graph is effective for presenting the summarized data visually.

A circle graph is used to best advantage to show the relationship both of the parts to a whole and among the various parts. For example, ask each student to compute how he spends his money during a given month. He adds the expenditures for the various items—food, clothing, movies, ball games, transportation—and then figures them as percentages of the total expenditure. A circle represents the total amount spent—100 per cent. The cost of individual items is then entered on the circle as fractional parts, with clear-cut dividing lines or different colors for the various segments.

Line graphs show variability of one or more factors, for example, precipitation and barometric pressure during a week. The days of the week, divided into six-hour periods, are entered on the horizontal line. Units of

Fig. 11.2. How is map use related to our rapid advances in communication and transportation? (Pittsburgh, Pennsylvania, Public Schools.)

precipitation are recorded on the left upright, and units of barometric pressure on the right upright. The barometric pressure and rainfall are recorded at each six-hour interval every day.

Since a great deal of information is presented graphically in newspapers, magazines, and books, students should learn how to interpret graphs. The best way to teach this is to have them secure information, summarize it, and present it as a graph (Fig. 11.2). High-school students often need considerable individual assistance in plotting a simple circle or bar graph.

MAPS AND GLOBES

One has only to spend a day in a modern secondary school to realize the variety of information that is presented by means of maps. Political maps, political-physical maps, and maps showing current events, rainfall, temperature, soil, population, and products, to name some of the more important, are displayed in classrooms and corridors (Fig. 11.3).

Modern map makers have greatly improved map coloring and the use of symbols. They have devised better methods for showing size, location, distance, and direction more accurately. The form, projection, color, and symbols selected depend on the kind of information the map is intended to convey.

As already indicated, maps are prepared for specific purposes. For example, in a current events map the major emphasis is on the broad sweep of events in the various political regions of the world. The paper for such a map is relatively cheap, and the projection distorts both distance and size slightly. The map is not intended to show minute details of distance and size perfectly. A modern air map with the North Pole at its center shows distance and size in the northern hemisphere in the proper perspective, but the same features are somewhat distorted for land masses in the southern hemisphere. Thus, in selecting maps for classroom use,

the teacher should know what purpose the map is designed to serve.

Since the earth is a sphere, a globe represents it most accurately. The principal types are political, physical-political, and slated outline; they range in size from the small desk globe to the large one that the whole class can see from their seats. The physical-political globe with boundaries and elevations indicated by color, and the slated outline globe are especially useful in secondary schools. Since transparent globes are now available at relatively lower cost than was formerly the case, they are becoming widely used. No other teaching aid can satisfactorily replace a globe for teaching about such matters as the

Fig. 11.4. What ideas can be gained from a globe that cannot be obtained from a flat map? What are the advantages of the transparent over the nontransparent globe? (Farquhar Transparent Globes.)

earth's rotation, time zones, the international date line, and great-circle routes, and conveying precise ideas of area, shape, location, direction, and distance on the earth's surface (Fig. 11.4).

THE CHALKBOARD

The slate that was so important as an instructional material in schools up to the past few decades has been replaced by the chalkboard, found in almost every schoolroom today, including that of the principal and counselor. A movable chalkboard is available for rooms that have none.

How may the teacher use a chalkboard in four areas of instruction common to students in Grades 7 to 12—English or language arts, history or social studies, mathematics, and science? He could use it in the following ways, among many others: to give instructions to the class, to summarize

a class discussion, to indicate the major steps in a project, to draw attention to the differences and likenesses in the spelling of certain words or in mathematical processes, to diagram scientific specimens and processes, to show relationships that can be visualized with lines and words.

Students also can use it in many ways, either singly or in small groups, particularly for graphs, charts, caricatures, and outlines. Frequently they can handle chalk as well as the teacher can. Although two-dimensional relationships are readily shown with chalk, three-dimensional relationships require more skill.

Not to be overlooked in this connection is the adolescent's need of physical activity (Fig. 11.5). When several teachers have the students for successive periods, the students usually sit a great part of the time. It is wise for the teacher who has the class the last period in the morning or afternoon to provide some form of physical activity. To the extent that the students can learn as efficiently using the chalkboard as sitting in their seats the teacher has them work at the board in small groups. One of the principal reasons that junior high-school students like board work is that it satisfies their need for physical activity.

Fig. 11.5. What are the values in this use of the chalkboard? (Cleveland, Ohio, Board of Education.)

STUDY DISPLAYS AND THREE-DIMENSIONAL MATERIALS

Here is a partial list of visual aids to learning which may be displayed on a bulletin board or on a similar flat area:

Cartoons	Drawings
Charts	Graphs
Diagrams	Maps

Paintings	Postage stamps
Photographs	Postcards
Pictures	Prints

These can be secured from various sources; some can be made by the students.

Some of the three-dimensional objects which may be placed in a study display area include the following:

Aquariums	Small apparatus
Biological specimens	Student-made museums
Carvings	Various types of student-made and
Dioramas	commercial products
Models	

Unfortunately, many classrooms are so crowded with furniture and students that there is little space for a display area. The walls of some classrooms are so completely taken up by chalkboards and windows that there is no space for a bulletin board 3 x 6 feet. The methods suggested by Kinney and Dresden [1] for overcoming some of these handicaps may be summarized as follows:

1. Cover the hard-surface wall with padded canvas and paint it the desired color.

2. Apply monk's cloth or Indian head to the wall by gluing the top edge close to the ceiling and letting it dry. Then stretch the material and fasten the bottom edge near the floor.

3. Cover a wall with beaver board or green label board.

4. Make a checkerboard arrangement of small pieces of wood to any dimension desired and secure it to the wall at an appropriate height.

5. Attach wire, twine, colored ribbon, or jute from the upper molding, and use it to attach display materials.

6. Use cellulose tape, labels, and circular reinforcements to make flat materials adhere to a slate chalkboard.

7. Use pins for this purpose with painted chalkboards.

8. Cover the chalkboard with colored paper and pin materials to it.

9. Cover the chalkboard with celotex or wallboard cut to fit the board; use nails, screws, or hinges for this purpose.

[1] Lucien Kinney and Katharine Dresden (eds.), *Better Learning Through Current Materials*, Stanford: Stanford University Press, rev. ed., 1952, pp. 145–147.

Fig. 11.6. What learning opportunities does this study display provide? What competences and attitudes are suggested for the teacher? (Crow Island School, Winnetka, Ill., Architects-Engineers, Eero Saarinen, Perkins & Will.)

10. Cover windows and doors when this can be done without seriously interfering with lighting or the use of the doors.

11. Provide display cases for three-dimensional objects.

12. Extend the display area out into the corridor leading from the door of the classroom.

Setting up the display, including use of color, artistic arrangement, lettering, and psychological timing are important factors in its effective use (Fig. 11.6). As Wittich and Schuller state: ". . . The study display is an instructional opportunity which calls upon teacher and pupil alike for creative planning and ingenuity. Since the study display is a means of relating appropriate graphic materials to the subject currently being studied, it constitutes an opportunity to bring together useful pictures, graphs, comics, posters, charts, symbols, and related illustrative materials to supplement the current study activity." [2]

[2] Walter Arno Wittich and Charles Francis Schuller, *Audio-Visual Materials: Their Nature and Use*, New York: Harper & Brothers, rev. ed., 1957, p. 152.

The present is more interesting to high-school students than the past. Most of us read newspaper items concerning our local school or magazine stories about school events in the nation, in preference to textbook descriptions of education in colonial times or even in the early decades of the present century. That current events command universal interest is attested to by the popularity of newspapers and magazines as reading materials. Students now in school should learn how to use current reading materials intelligently because many of their decisions now and in the future will be based on information secured from newspapers, periodicals, pamphlets, brochures, etc.

An interesting and extensive investigation of use of current reading materials in the classroom was conducted by the California Council on Improvement of Instruction. The study was begun in 1946 when the Division of Secondary Education of the California State Department of Education suggested that experimentation in increased use of such materials, including newspapers and periodicals, might prove useful. In the early stages the project was supported financially by Time, Inc. Lucien Kinney, Reginald Bell, and Katharine Dresden, all of Stanford University, served as consultants.

Some forty-eight teachers throughout California participated in the study as members of the council. They set up various experimental teaching procedures calling for the use of current reading materials, put their plans into action, discussed their experiences at council meetings, evaluated the results, and reported their findings. Newspapers and periodicals or both were used in classes in art, biology, chemistry, English, foreign languages, history, homemaking, journalism, literature, mathematics, oral composition, physics, physiology, remedial reading, social studies, and speech. Their use by four teachers is summarized as follows:[2]

1. Students in an eleventh-grade English class decided to write a biography of a local person as one activity in their study of biography, and agreed to make a local doctor the subject. They immediately needed more information both about the doctor and about writing a biography. To secure this, they organized the class into committees which interviewed

[2] Lucien Kinney and Katharine Dresden (eds.), *op. cit.* These descriptions appear on pp. 20-21, 37-38, 56-57, 74-75; many others are included in this book.

the doctor and other people who knew him, consulted the newspaper files, and studied other biographies. When, early in the project, the local newspaper expressed an interest in publishing the biography, the class began considering content, style, and correctness more seriously. This was reflected in the activity in the classroom and in out-of-school work. After all the information had been gathered and analyzed in group discussions, it was organized, typed, evaluated by the class, and sent to the newspaper for publication. The teacher gave a succinct evaluation of the students' work when she said, "As authors, the class now discusses, with workmanlike competence, the work of fellow biographers."

2. A group of ninth-grade students whose test scores in reading achievement were below the eighth grade were placed in a remedial reading class. These students also ranked low in knowledge of current events and breadth of reading interests; this was discovered in class discussion and in a questionnaire and a news quiz that were given them. The teacher tried to increase their vocabulary, reading comprehension, speed, and interest by using the daily newspapers as the basic text. Each of two newspapers supplied the class with thirty-five copies every day during alternate months. The students read whatever they wanted to—frequently the comics—during the first few minutes of the class. Oral reading of editorials and political news came next. The teacher used a variety of methods to maintain their interest in reading other sections of the paper, to increase vocabulary, to outline the key ideas in a story, and to read for extended periods of time. The teacher considered the procedure a success, for when the class changed from one newspaper to the other each month it was clear that the students were learning how to use a newspaper.

3. Students in an American history class gathered information about current events outside of class and, led by student chairmen, discussed it for ten minutes at the beginning of class each day. Student activities which originated in these discussions led to debates on Russia's aims and their possible outcomes and on the closed shop, among other current issues. Moreover, the students soon began to bring to class other news items that stimulated interest in wider reading and in small-group discussions. Accordingly, the teacher concluded that the students had a better understanding of such aspects of American history as the origin of the Constitution, the extension of political rights, and the Reconstruction pe-

riod. They were more aware of the importance of understanding history in appraising the significance of current events.

4. Radioactivity came under investigation in a teacher's physics and chemistry classes. Textbooks available did not include technical facts about it or an analysis of its social implications, so the teacher and students turned to current sources of information, such as *Fortune, Life, Newsweek, New York Times Magazine, Popular Science, Science Digest, Science News Letter, Scientific Monthly, Time, Vital Speeches,* and *Weekly News Review.* Some fifteen aspects of the topic were analyzed in panel discussions, including an investigation of the completeness and accuracy of the facts. Test results and evaluative discussions showed that the procedure was effective.

These examples illustrate specific uses of current reading materials (Fig. 11.7). Many other kinds of printed matter may be obtained for classroom use. These include bulletins, pamphlets, and brochures which are prepared and distributed, free or at low cost, by private groups and government agencies.

Fig. 11.7. In which classes may newspapers be used to good advantage? Why should students be helped in reading newspapers and other current news sources? (Richmond, Virginia, Public Schools.)

SILENT FILMS, FILM STRIPS, SLIDES

The commercial production of silent films ended when it became possible to transmit sound simultaneously with the projection of visual images. Although silent films are of limited educational value, one characteristic should not be overlooked. Many high-school students have movie cameras and take excellent pictures; the student showing the pictures

Fig. 11.8. What are the advantages and disadvantages of still projection, such as filmstrips and glass slides? (Chicago, Illinois, Public Schools.)

provides a verbal description when necessary. Students generally are greatly interested in their own activities and those of their friends; hence student-made movies are often stimulating. Their production and use make for good motivation, creativeness, and healthy school-community relations. Motion pictures showing how a teacher gives a group test, how students set up an experiment in chemistry, how the homeroom is decorated for American Education Week—these are a few of the everyday occurrences that can be filmed and shown to new students and teachers, and to parents and community groups. Silent films are used widely in coaching in athletics.

Filmstrips consist of a sequential series of still motion pictures that show characteristic situations or definite steps in a process. They are particularly valuable in science classes, for showing the steps of an experiment, various stages in life processes, or pictures of plant and animal life for detailed consideration. Thus the major features of an industrial plant may be identified before a social studies class visits it on a field trip. Designs in leather or metal may be shown in art classes. The operating parts of a carburetor may be shown in a class in automobile mechanics.

A major value of the filmstrip over the moving picture is that closer and more sustained attention is possible. The filmstrip can be stopped at

any point to permit questions and discussion, and a picture on it may be looked at as often as desired.

Glass slides serve similar purposes as filmstrips do. A song may be projected in a music class. Phrases and sentences may be projected for a decreasing period of time to help acquire speed in reading. A business letter can be projected and its form clarified. The chief disadvantages of glass slides are their difficulty of production, the space required for storage, and the danger of breakage.

Filmstrips and slides are used widely in many subject fields and at all grade levels because they provide a true representation of processes and objects, permit careful examination and restudy, do not require expensive projection equipment, and can be prepared by the students and teacher (Fig. 11.8).

AUDIO MATERIALS ENHANCE MEANINGFUL LEARNING

Radio programs, phonograph records and transcriptions, and tape recordings are the major audio aids to learning.

RADIO

The teacher suggests radio programs for the students to listen to both in and outside school. A primary difficulty in using commercial programs in school is that the ones most suitable to the learning activity are frequently not broadcast when needed; this also holds true of educational broadcasts. Listening to programs outside school overcomes this difficulty when correlated with units of study. The examples which follow show the continuing importance of radio as an aid in instruction.

Students in an American history class were studying political platforms and candidates during a national campaign. Among the questions raised in discussion were: (1) What are the platforms of each party? (2) Who are the candidates for President and Vice-President? (3) How does each candidate state his own views in relation to his party's platform? (4) Which party's is best? (5) Which candidate would you vote for?

The class obtained information on the platforms from the newspapers. Radio schedules were investigated in class and programs were assigned to be heard. Information obtained from these programs was brought to class and discussed when appropriate in connection with earlier political campaigns, platforms, and candidates. Students were given specific writ-

ten assignments based on the radio programs which included outlining speeches they had heard, evaluating the accuracy of the information presented, and noting how frequently the candidates went contrary to their party's platform. To help clarify whom to vote for, sociodramas were enacted with students playing the roles of candidates. Panels of four students, each representing a candidate for various offices in the same party, discussed the legislation probable if they were elected. Thus, there was effective preparation for the radio programs, adequate supervision by the teacher to assure that the students listened to the programs, close correlation with the material being studied, and effective follow-up.

An agriculture class was studying livestock marketing in addition to carrying out various other projects. Each day during the class a short radio program was tuned in which carried reports of livestock prices. Line graphs of the daily prices of cattle, hogs, sheep, and poultry were made by the committees of students who were responsible for listing the various prices. This work was correlated with studies of preparing livestock for shipment, handling livestock in transit, supply and demand, the government's price support program, and the effect of the international situation on livestock prices. Charts prepared by the Department of Agriculture were analyzed to discover months when shipments were at a peak and prices correspondingly low. This analysis helped students to estimate whether the same pattern would probably hold in the future.

Fig 11.9. The use of radio continues to increase in spite of television. What learnings can be correlated with an activity such as this? (Toledo, Ohio, Public Schools.)

Radio has another use in school, when students prepare the script and produce a broadcast for a commercial or school-operated station, or a school public-address system, or set up "ham" short-wave systems (Fig.

11.9). Students in a high school in California have been broadcasting over commercial stations for years, as have many other high-school groups. Various kinds of programs are produced: musicals, with student performers; recorded music, with students acting as disk jockeys; dramatic presentations, with student casts; school news reports. Definite times are scheduled for school programs each week of the school year. The more important values of this procedure to the students who participate are as follows:

1. Students learn to write clearly and creatively.

2. They work to improve their voice or other skills required.

3. They learn to listen more attentively to radio programs and class discussions.

4. They learn to express themselves orally.

5. They acquire basic facts about the production of radio programs.

6. They learn to observe definite time schedules.

7. The program helps to create a feeling of affiliation and belonging among all the students because it is "their" program.

8. It unifies many aspects of school life, including the instructional program.

9. It creates better school-community relations.

10. It stimulates student interest in educational broadcasts.

The teacher must assume the same degree of responsibility in selecting, guiding, and following up the use of radio in and out school as is needed in other activities such as field trips. Directing student broadcasts requires special understanding of radio production techniques.

RECORDS AND TRANSCRIPTIONS

The use of records and transcriptions will become clearer as we examine the subject areas for which they are produced. The following are a few of the many records and transcriptions listed in *Selected Listings of Educational Recordings and Film Strips for More Effective Learning,* a catalogue published by Educational Services, Washington, D.C.

In social studies, a series of twenty-four recorded programs entitled *Immigrants All; Americans All* includes the following: *Our English Heritage, Our Hispanic Heritage, Willing Freedom, The Negro, Social Progress, A New England Town,* and *An Industrial City.* These records are dramatized by leading performers. In the same area, *Voices of Yester-*

day presents twenty-four historic figures. Included here are Florence Nightingale *Addressing Her Comrades*, William Jennings Bryan *On Freedom for the Philippines*, Admiral Robert E. Peary *On His Discovery of the North Pole*, Theodore Roosevelt *In a Message to the American Boy*, and Will Rogers *On Politics*.

For English classes, recordings of well-known novels, poems, and short stories by leading dramatists are available. Shakespeare's plays, dramatized by casts including such well-known artists as Maurice Evans, Orson Welles, José Ferrer, and Fay Bainter, have been recorded.

The teacher of speech and language classes may obtain records of various dialects used in this country and in Britain. Records are also available for self-improvement of speech and for learning to speak various foreign languages.

Records and transcriptions are more useful in the school than is radio because important speeches and dramatic and musical productions are being recorded and made available at relatively low cost. Such records are listed in various source books; they can be stored easily, and then used at the most opportune time.

TAPE RECORDINGS

As the phonograph records important events in national and international affairs, including music and drama, the tape recorder is used for local events, including those of school and classroom. Although tape recordings can be reused indefinitely, probably their most important value is in the appraisal of progress in conduct, skills, concepts, and appreciations (Fig. 11.10). Illustrations will make this value clear.

After discussing with the teacher the desirability of entering the classroom quietly and starting work, the students still continue talking and being noisy. Unnoticed by the students, the teacher puts a tape recorder in the rear of the room and records the noise they make until he quiets them. He then tells them about the recording and asks them to listen to it quietly. At the next meeting of the class, he records the first few minutes, again without their knowledge. This time he plays both recordings and leads a class discussion of the improvement. Meetings, both informal and more formal, can also be recorded and played back for self-evaluation.

Progress in speaking, singing, and using a foreign language can also

be shown by tape recordings for individuals and groups. Thus, at the beginning of the fourth week of the class in Spanish, the teacher records a ten-minute student conversation in Spanish. From four to eight weeks later he records another ten-minute conversation. Both are then played back so that the students may evaluate their progress and with his help determine the areas which call for improvement. Musical performances, dramatic readings, voice correction exercises, and the like may be evaluated similarly. In addition, tape recordings serve well to inform parents concerning a pupil's progress in areas of study involving sound. The teacher can play for them a recording of the student's first attempts in singing, reading, speaking a foreign language, or playing a musical instrument and then his performance one or even ten months later. His progress is evident to the parents; there is little need for the teacher to say anything.

Fig 11.10. For which learnings is the tape recorder particularly well suited? How can it be used to appraise progress in learning? (San Diego, California, City Schools Photo)

A mathematics teacher has introduced the concept of equations. How well do the students understand it after the ten-minute presentation? Tape recording their answers to the questions he asks provides a partial answer. After they have done more work with equations, another tape recording provides the comparison needed to determine their progress.

One of the principal purposes of the study of literature is to heighten appreciation, that is, to develop desirable attitudes toward good literature. The extent to which this purpose is being achieved can be shown by a tape recording in the third and tenth week of the students' responses to the teacher's question: "What have you read during the past week and how well did you like it?"

The tape recorder is also used to provide permanent records of band, orchestra, and choral performances; student government meetings and

other cocurricular activities; and high points in various units in all areas of school work.

THE SOUND MOTION PICTURE AND TELEVISION COMBINE MEANINGFUL SENSORY EXPERIENCES

The sound motion picture and television offer unique educational values in that motion and sound are brought to the student simultaneously. With television programs now being recorded as kinescopes and telefilms, their availability and control for classroom use is approaching that of recorded radio programs. The sound motion picture and television provide more self-contained instruction than any other audio-visual material discussed in this chapter. But they cannot replace books and direct experience, nor can most of the desired objectives of secondary education be achieved by substituting motion pictures and television recordings for teachers.

SOUND MOTION PICTURES

Glenn Frank expressed himself as follows after seeing the film, *Plant Growth:*

Yesterday within the space of ten minutes, I saw a plant grow to full maturity, bear fruit, and die. As a child I often stood with awe before the mystery of plant growth and wondered what it might be like to see the actual processes of growth as I saw my playmates run back and forth across the village lawn.

I had to wait forty years to see it, but yesterday, the thing I wondered about as a child, happened. I saw the processes of growth as clearly and as plainly as this morning I see motors streaming by in the street below my hotel window.

Conan Doyle had not come back to show me marvels in a séance. I was not under the delusive spell of a magician. I was simply watching an educational film on plant growth.

A pea was dropped on the ground. Soon its side burst open and a white sprout, or whatever the experts call it, came peering with manifest curiosity out into the open. The white sprout turned downward and began nosing about for a way to burrow downward in the soil. It nosed about with an appearance of almost animal sense. Soon it began its downward journey into the soil which had been cut away so the camera could catch the downward journey of the root.

Frank's account relates to the use of changing-speed photography in making motion pictures. Plant growth was recorded at brief intervals over many months; then the photographs were edited for presentation in rapid sequence, and finally made into a ten-minute film. Slow-motion

photography embodies the reverse process, in that movements too rapid for the human eye to see are caught by the camera and slowed down so that they become visible.

Photomicrography permits the photographing of phenomena that cannot be seen by the human eye. Growth and division of human cells and of other microscopic plant and animal life, viruses, and erosion are among the processes and objects that can be seen clearly by means of photomicrographs. The process is especially useful in classes in science and applied science.

Fig. 11.11. Why do students generally pay greater attention to a sound motion picture than to other audio-visual materials? (Bell & Howell Company.)

Animation in motion-picture photography has reached a high level of perfection in the Walt Disney productions. Concepts that are difficult or impossible to photograph, such as prenatal growth, atom splitting, H-bomb devastation, and air currents, can be visualized in drawings, then photographed and shown in rapid sequence to give the effect of movement or animation. Many of the mysterious processes—photosynthesis and energy conversion, for example—that are so challenging to adolescent imagination are revealed in animated motion pictures; such pictures are available in many subject fields.

Not least among the values of sound motion pictures is the fact that observable events can be recorded in black and white or color as they occur, and the accompanying sounds recorded. For this reason, the sound film offers opportunities for improving learning that are impossible when sound recordings or silent movies are used alone (Fig. 11.11). Because of this versatility, the sound motion picture is used in the last section of the chapter to exemplify the intelligent use of audio-visual materials.

TELEVISION

Television is so popular because the viewer can see events anywhere that can be recorded by the television camera. The accompanying sound

Fig. 11.12. An activity such as this facilitates learning. Why must such activities be given serious consideration in improving community attitudes toward the school? (Atlanta, Georgia, Public Schools.)

can be presented simultaneously, or it can be cut out, the narrator supplying the commentary. Educational television is still in its infancy; however, some school systems are now producing programs, including New York City, Philadelphia, Pittsburgh, and St. Louis. Many programs, both commercially produced and educational, are being brought in directly to classrooms that have television receivers.

The correlation of television programs with school work is similar to that suggested earlier in this chapter for radio. However, educational television is much more powerful than radio in presenting information and influencing attitudes because any of the visual and audio materials already discussed can be included in a television program.

To what extent can, will, or should television replace teachers? As was just said, educational television can perform at least two main functions well: present information and influence attitudes. Whether agree-

ment can be reached on which attitudes to influence is debatable. Watching a television program without doing any further work or study or being guided by an expert is not useful in developing any skills other than those connected with seeing and listening. Educational television does, of course, keep students from expending the energy necessary to develop a skill and some commercial programs are keeping students from reading, thinking, and doing. Furthermore, a televised lesson or unit necessarily presents the same material in the same time to all the students. If individual differences are to be satisfactorily provided for, television is not the answer. Hence, educational television for high-school students seems destined primarily for enriching their learning experiences (Fig. 11.12); no learning aid has higher possibilities along these lines.

Just as a radio or school program can be recorded on tape or on some other recording device, so television programs can be recorded by kine-photography. The resulting kinescope, containing both sound and picture, is then presented on a regular 16mm. motion-picture projector. The better commercial and educational television productions are now being recorded, and are thus available, when funds are sufficient, for use in school situations.

AUDIO-VISUAL INSTRUCTIONAL MATERIALS MUST BE USED INTELLIGENTLY

Sufficient examples of classroom use of audio-visual materials have been given to suggest four main principles for their intelligent use:

1. Select the material in terms of the learning goals.
2. Prepare the students to use it.
3. Provide follow-up activities.
4. Evaluate the outcomes.

Each of these principles will now be discussed briefly.

SELECT THE MATERIAL IN TERMS OF THE LEARNING GOALS

The best procedure for selecting films in a school is to organize a committee of teachers under the chairmanship of the school, city, or county supervisor or coördinator of audio-visual materials. The committee examines the list of films owned by the school, a recent educational film catalogue, and a list of films that can be rented from a central school

office or a state or community agency. The teachers select films for preview. When previewing a film, they consider these questions:

1. What specific instructional purposes does this film serve?
2. How and where does it fit into my unit or course plans?
3. Is this film suited to the mental, social, and emotional maturity of my students?
4. Does the film present its message clearly and accurately?
5. Is the film sufficiently realistic to capture and hold the interest of my class?
6. Will the film make learning more effective?

The main reason for previewing films is to make better selections and to allocate them to various classes. Information presented in films generally sweeps across subject lines with apparent purpose. Thus, the films *How to Read a Book* and *Act Your Age* may be used advantageously in most high-school classrooms during the first week of school. But students should not be required to see the same film in three or four classes during a short period of time.

PREPARE THE STUDENTS TO USE THE MATERIAL

Before a film is shown, the teacher should prepare his students to see it. During the preview, he notes the main features of the film, any terms which may be difficult for the students, and questions or problems that are directly related to the current classroom activity. Class discussion makes the reason for seeing the film apparent to the students, and a list of questions and features is discussed, placed on the board, or distributed in mimeographed form. This type of introduction is extremely valuable to the students. To show a film such as *Human Reproduction* or *Dating Do's and Don'ts* without this preparation is to misuse the film badly. Some schools always show an educational film to the whole school in the assembly without giving teachers and students any opportunity for advance preparation. Obviously, entertainment films may be used in this manner, but the probability of misuse in the case of educational films is very great.

In most high schools the teacher is responsible for having the classroom and equipment in readiness for showing the film. In the larger schools, students who are interested in becoming professional projectionists often form clubs. In other schools the classroom teacher locates such

students and they become responsible for film projection. Some schools capitalize on this interest, with classes in graphic arts being organized by the teacher who is responsible for the care of all projection equipment and graphic materials, and with students on call during their free periods to project films and to use other visual aids as the teacher desires. Every teacher should be able to operate a projector himself and to teach students how to do it.

PROVIDE FOLLOW-UP ACTIVITIES

If a film is good educationally, it should lead to the discussion or further study of a related problem or topic. Follow-up activities are based on the type of film. For example, such activities for a film which explains how to read a book may include the following: (1) Discuss the major points presented in the film, and any questions asked by the students. (2) Give specific assignments, if recommended by the film; if none are suggested, provide your own. (3) Note how the students do these assignments; discuss any problems that arise. (4) Show the film again to help them evaluate their performance.

The author has found that identifying the main points in a film and discussing them very briefly with the class, putting them in question form and presenting these questions to the students before showing the film helps focus student attention. After the film he forms the class into groups and assigns a question to each group for discussion and subsequent reporting to the class. With some films he asks the questions and follows the film with a whole-class discussion. Both procedures work very well.

EVALUATE THE OUTCOMES

Did the students learn what they should have? How well did they do so? Class discussions, observing the students in action, and testing are the three principal means of evaluating the effectiveness of any instructional material. Each of these was treated at length in Chapter 9.

SUMMARY

Intelligent selection and use of the many audio-visual materials of instruction are important for the modern teacher. Visual materials such as flat pictures and other graphic materials, globes and maps, chalkboards,

reading materials, and the study display facilitate learning that is accomplished by means of sight. The radio, phonograph, and tape recorder have demonstrated their value in facilitating learning that is accomplished by means of hearing.

Sound motion pictures and television provide for more efficient learning because they combine hearing and seeing. The sound motion picture is widely used in secondary schools today with excellent results. Television is still in the experimental stage as far as classroom instruction is concerned. However, it gives promise of having a more powerful impact on education than any other audio-visual resource—perhaps as strong an impact as commercial television has had on our recreational, reading, and other daily habits generally.

Audio-visual materials, including television, should be considered as materials of instruction. Television cannot substitute for the teacher's face-to-face leadership of the learning activities, independent reading and direct experiencing of students, or of small-group and whole-class discussions, problem solving, and undisturbed reflective thinking.

All audio-visual materials must be used intelligently. To achieve the desired results, the material must be selected in terms of the learning goals sought, the students must be prepared for its meaningful use, appropriate learning activities must follow its use, and outcomes must be evaluated.

Questions and Activities

1. Rank in descending importance the visual aids discussed in this chapter on the basis of educational value, cost, ease of use, and ease of making in class.
2. Rank the audio aids in the same way.
3. Individually or with one or two others, select the best examples you find of the use of each visual material in textbooks, magazines, or classrooms.
4. Repeat the preceding for audio materials in the classroom.
5. Preview a film related to your subject-matter area and appropriate for a high-school unit. Outline a plan for using it.
6. Related to your subject-matter interest, organize a lesson plan on the basis of the suggestions in Chapter 6, and list possible instructional materials for use in it.
7. Compare the relative values and problems involved in using the radio, sound motion pictures, and television in secondary schools.

8. Discuss the values to be derived by students from the production of any three materials discussed in this chapter.

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As EARLY as the seventh grade, students are often told what to do without being given any help in how to do it. As a result, they acquire study and independent work methods on a trial-and-error basis. Such methods lead to inefficiency and, more important, to lack of interest in independent study or work because the students experience failure rather than success. Most high-school and college students, including graduate students, frequently need their teachers' assistance in starting a task quickly and correctly, identifying and using materials well, concentrating, and completing the task successfully. The teacher's daily pattern of instruction should include this assistance. Although some of the principles to be discussed do not apply so readily in certain subject-matter areas, every high-school teacher in any subject field or cocurricular activity can put most of them into use.

1. Student readiness is increased.
2. The situation is made conducive to study.
3. Students learn to use the textbook and related material.
4. Students learn to read more efficiently.
5. Students learn to write better.
6. Students are helped with study and work schedules.
7. Students who have serious problems are given special treatment.

Special attention is given to reading and writing in three sections of this chapter because reading is still the principal means of acquiring information through independent effort and writing is still the principal means of conveying information for subsequent reading. Little attention is given to group discussion and oral presentations since they were treated in Chapter 10.

STUDENT READINESS IS INCREASED

Have you ever tried to concentrate on reading detailed material, such as income tax directions, when you felt ill? Have you ever tried to take a long examination or write a theme when your best friend was in the hospital seriously ill? Have you ever taken a senior-year course in college chemistry without having had the necessary prerequisite courses? Have you ever tried to knit a sweater or build a bird house when you felt sure

that you did not have the necessary physical and mental abilities? A person's physical condition and his social, emotional, and mental characteristics, together with his previous achievements and his present work habits, are important in determining how efficiently any task is begun and completed. The following discussion analyzes these factors briefly.

PHYSICAL CONDITION

It is trite to say that a student who feels ill, who has a physical defect that is uncorrected or not compensated for, who is malnourished, or who does not get sufficient rest is incapable of effective work. Any one of these factors may keep a student from doing his classroom work.

Various methods may be employed to identify the ill and physically handicapped. Medical examinations should be the means of discovering visual and auditory defects, other structural defects, and any physiological malfunctioning which interferes with good health. The school nurse should send each teacher a note concerning any physical condition that requires special attention on his part (Fig. 12.1).

Fig. 12.1. The school nurse is an invaluable asset to the secondary school, for students cannot study and learn well when they are ill or have uncorrected physical defects. (Malden, Massachusetts, Public Schools.)

If a school gives no medical examinations and has no school nurse, the teacher can do these things: Note left-handedness and provide for it; note the students' physical size and seat them accordingly; look for students who hold printed matter near or far from their eyes to detect near-sightedness and far-sightedness and seat them accordingly; note students who cup their hand to their ear or have difficulty in following a class discussion to identify the hard-of-hearing and assign seats accordingly; watch for sleepiness and lack of interest in the work to identify students with poor health habits.

The teacher is the first line of defense for locating physical defects, helping students overcome physical handicaps, encouraging good health habits, and preventing the spread of communicable diseases. Many young

people may be enabled to study more efficiently when unusual physical development, minor defects, and minor physiological malfunctioning are identified and adjusted for in the classroom. Serious conditions should of course be referred to the parents or the school physician.

SOCIAL AND EMOTIONAL ADJUSTMENT

Does a student have one or two good friends in the class, or is he an isolate? Whether they appear so in the classroom, adolescents are interested in how others react to them. If they are to become well-adjusted adults, they must learn to make and keep friends. A student who has no friends in class and does not get along well with his teacher may not study effectively.

A sociometric test is the best means of discovering the social relationships within a classroom after the students have had an opportunity to become acquainted with one another. As was said in Chapter 2, a sociogram may be used to identify the isolates, the cliques, and the popular students. When sociometric tests are properly interpreted, inferences may be drawn concerning each student's social adjustment.

Social adjustment may also be appraised by observing students during discussion and committee work, and when they are presenting individual and group reports and responding orally to them. Students with the following characteristics should be identified: the shy, the unpopular, the argumentative, the aggressive, the self-centered, and the clique-centered. Although such characteristics are on a continuum and therefore we cannot categorize all students on such bases, those exhibiting them to an extreme degree should be identified. They frequently do not concentrate well in individual work nor can they work well in groups. Depending upon the behavior they exhibit in their social relations, the teacher must devise appropriate methods to help them overcome their deficiencies.

Emotional and social adjustment are closely related. Emotions originate and are expressed, for the most part, in an individual's interaction with other people. Anger, jealousy, fear, and affection are not readily identified in adolescents because many have already learned to hide their true feelings.

Continuous worry and anxiety about physical development, friends, school work, religion, or home conditions are also not easily recognized

Fig. 12.2. Thinking intently about a personal problem interferes with study. How can the teacher help an adolescent who cannot concentrate? (Chicago, Illinois, Public Schools.)

(Fig. 12.2). Anxiety which persists for relatively long periods of time is very destructive to any kind of concentrated effort. It is the method of expressing emotion, its intensity, and its duration which most hinder an adolescent's work. Hence the teacher needs to observe the expression of adolescent emotions. Analyzing the conditions under which the emotion

originated enables the teacher to change them, work with the student directly, or to refer him for more specialized treatment later.

PREVIOUS ACHIEVEMENT

Reading and other materials for classroom use become increasingly difficult as they are progressively based on already developed understandings and skills. The vocabulary in a series of social studies or mathematics texts increases in difficulty at each grade level. So do typing, shorthand, music, physical education, and other skills. A student's work methods in any high-school situation depend upon the extent to which he can draw upon his previous achievement for present purposes and the degree to which the work requirements set by the teacher are in harmony with his present achievement level.

Fig. 12.3. Previous achievement affects the student's readiness for new learning. What should the teacher know about these students' previous achievements in mathematics? (St. Louis, Missouri, Public Schools.)

Standardized tests are useful but not essential in determining the level of achievement in subject fields. Teachers can make their own tests or use other methods to ascertain whether students have the achievement required for the present work. For example, words, phrases, and sentences from a textbook may be used in a test to determine how well students have mastered the vocabulary they will need to understand the book. All mathematics teachers should be able to construct tests that will indicate each student's readiness for the introduction of new work (Fig. 12.3). In any class activity a teacher needs to devise appraisal techniques for determining where his students are, and to use teaching procedures that will get them off to a good start from that point. Unless these factors are given consideration students cannot develop effective study habits in the beginning and they drop progressively further back as the work progresses.

ESTABLISHED STUDY HABITS

Since early childhood high-school students have been acquiring attitudes toward work and toward ways of doing it. Some of these are good; others are not. When one student comes across a new word, he adds it to a list, discusses it with his teacher or parents, or finds its meaning in the dictionary. Another student skips over the new words, quickly loses interest in reading because he does not understand what he is reading, and quits. One youngster has learned to do certain things at home—to keep his room tidy, to get up for school on time, to take care of his clothing, and to keep the lawn mowed. He does these things promptly and without prodding, and considers he has failed unless he completes them on schedule. Another has indulgent parents who do everything for him, or his parents may have such lives that they cannot get any semblance of order in the home for themselves or their children.

Fig. 12.4. What might a teacher learn about students' usual work habits in this situation? (Madison, Wisconsin, Public Schools)

As was suggested in Chapter 7, in a good learning situation the student's work habits may be appraised by noting how long he takes to get started, how he cares for and uses materials, how well he concentrates, and how well he completes his work (Fig. 12.4). It is wise not to give heavy common assignments early in each unit or semester. Flexible assignments are better, the teacher helping the students learn how to learn through efficient study.

INTELLECTUAL CAPACITY

The student with high intellectual capacity may not start to work as quickly or concentrate as persistently as the student with average or low intellectual capacity. However, he needs less help in learning to attack verbal and abstract problems than the other student does.

Identifying various degrees of intellectual capacity may be done by

IMPROVING STUDY AND WORK METHODS

administering IQ tests, by examining school marks, and by observing the quality of the work performed (Fig. 12.5). In general, the brightest students can memorize rapidly, have large vocabularies, read rapidly, manipulate abstract concepts readily, have good school records, and make many original contributions to classroom discussions. Qualities like these are on a continuum; there are no sharp differentiations between bright, average, and slow students. However, the teacher should be especially alert to discover the students who learn easily and those who are very slow. Both groups need special help in forming efficient study methods if they are to learn as well as they might.

THE SITUATION IS MADE CONDUCIVE TO STUDY

In one classroom the students get to work quickly and devote the whole period to work; in another the same students dawdle, draw pictures, day-

Fig. 12.5. On the basis of appearance, these boys might have much the same background. How does their teacher decide which if any of them may become an outstanding engineer? How do varying levels of intelligence affect learning readiness? (School District of Philadelphia, Pennsylvania.)
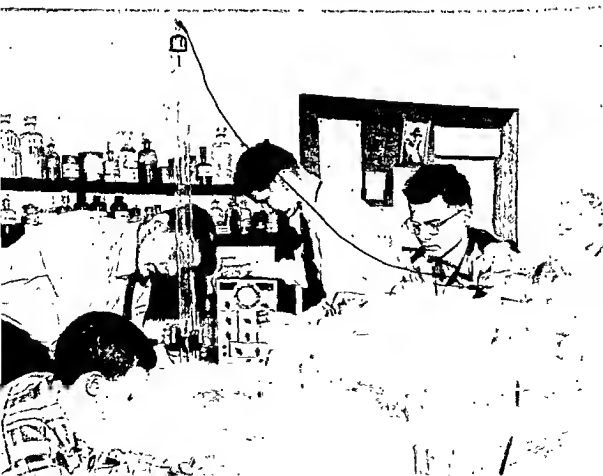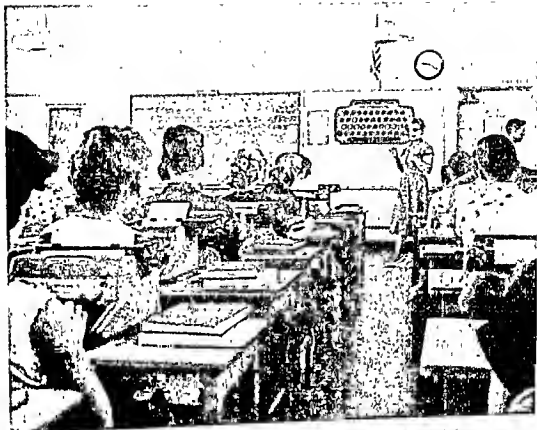
Fig. 12.6. What have this teacher and the school system itself done to make the physical environment conducive to good work methods on the part of the students? (San Diego, California, City Schools Photo.)

dream, distract their classmates' attention, and leave most assignments uncompleted. One boy who does not do well in any school activity is found to be well thought of in his job at the supermarket. Such differences may be due in part to whether the teacher makes the classroom situation conducive to study.

PHYSICAL ENVIRONMENT

Classroom conditions such as lighting, ventilation, adequate seating capacity, cleanliness, color, and decorations all affect work methods. This is too obvious to warrant extended discussion. It is true, however, that teachers often become accustomed to furniture, decorations, seats and lighting facilities; they are comfortable in the classroom because it is familiar and homelike to them. But they fail to realize that what is com-

fortable and familiar to them may not be conducive to effort on the part of their students.

The optimum physical setting for independent work, as during supervised study periods in the regular classroom, includes these features: a well-lighted, pleasantly decorated room that is free from distracting noises, a good-sized comfortable desk, and the materials required for concentrated work (Fig. 12.6).

INTERESTING ACTIVITIES

No one attacks a task energetically unless he is interested. He does not continue to work unless he feels he is making progress. Interest thrives on success and dies with failure. Some learning activities are interesting to students, others are not.

To stimulate students' interest in a given activity the teacher may (1) help them see the value of the work in relation to their immediate life or their vocational plans, (2) help them to see its significance as it affects their success and happiness in school, (3) start with relatively easy materials and assignments, (4) use interest-challenging materials and activities in an attractive setting that call upon all of a student's personal resources, and (5) devise methods whereby students can measure their progress (Fig. 12.7). Unless the learning situation can be arranged so it will arouse and maintain interest, students will not study well or work consistently.

THE LEARNING TASK

It is not always necessary to tell students exactly what to do, and how, when, and why to do it. But they must understand a group-originated problem or an assignment given by the teacher well enough to know what the task is, to understand methods of attack, and to visualize the anticipated outcome. It is the teacher's responsibility to make sure that all his students understand these characteristics of a learning activity. When they do not, there is much confusion but little learning. Assistance and directions given by the teacher vary according to the difficulty of the task and the students' readiness for it.

THE TEACHER'S METHODS

Students learn to study and to work effectively if the teacher guides them in such learning. The teacher who is unconcerned about how his

Fig. 12.7. These students will study efficiently because they are interested. What must be done to arouse interest and keep it at a high point? (San Diego County, California, Schools)

students study or who is impatient with them is not likely to teach them essential study and work skills. These skills, like others, are acquired gradually and continuously. It is each teacher's responsibility to help his students acquire the study skills which they need in order to profit most from the work. Teaching students how to study is as important as teaching subject information and facts. This should be done in a functional setting. It is easier to teach adolescents study methods in each class in algebra or English than to establish a special class to teach more generalized methods of study.

STUDENTS LEARN TO USE THE TEXTBOOK AND RELATED MATERIAL

Whenever a textbook is used as the basic instructional material, the students should be informed as to what it contains, what purposes it

serves, and how it can be used to best advantage (Fig. 12.8). The following discussion applies to supplementary textbooks and workbooks as well as to the basic textbook.

PREVIEWING THE TEXT

Students are helped to use a text by previewing it, under the teacher's direction. His main task is to ask questions rather than to explain. Thus, to start the textbook preview he asks: "Where do we look to find out what is in this textbook?" Several answers will probably be given. As soon as one student mentions the table of contents, the teacher asks the class to look at it in order to answer the question, "What are the main topics or units?" These may be discussed briefly to arouse interest in the book.

Fig. 12.8. Textbooks and related materials are important in learning; helping students understand and use textbooks well is the teacher's responsibility. (Kohler, Wisconsin, Public Schools.)

After the table of contents has been investigated, the preface or other introductory material may be analyzed. Depending upon its length, the students may be asked to read it silently in order to find out why the author wrote the book and what he considers important in it. This should be followed with a discussion. A series of questions, such as the following, may be placed on the chalkboard for long prefaces or introductory sections: (1) Why was the book written? (2) For whom is the book intended? (3) What are the most important points the author discusses? (4) How does he treat a topic or problem? After this study of the preface, the date of publication and the publisher should be noted.

By this time the students should begin to visualize what the book is about and how it is organized. A list of subtopics is now placed on the board or given to the students. Such questions as: "Where can we find information on these topics?" "Information about these people?" direct the students' attention to the index. Its arrangement is discussed briefly, and the students spend a few minutes finding the page numbers of

various topics; they may work together in pairs to find specific discussions of various topics in the index. After the teacher is certain that they know how to use the index correctly, he may ask each student to outline the main points about a topic or person presented in the book. The topics and names may be selected so as to lead to an analysis of graphs, charts, maps, and other visual aids. In most cases, however, these are probably better examined in connection with the chapter survey after specific reasons for obtaining the information have been established.

SURVEYING A CHAPTER

Usually the introductory paragraphs or the summary, or both, indicate the most important points discussed in a chapter. The introductory paragraphs often outline the major problems, the summary presenting conclusions made concerning them. The introduction and summary may also provide for continuity of chapters. Most textbooks use boldface, italics, marginal notes, or a numerical or alphabetical listing of items as visual cues for identifying the major points of a chapter.

The chapter survey should be integrally related with the work being done. Thus, after the class has seen and discussed a film on soil erosion, the teacher may say: "We have seen some of the effects of soil erosion and have expressed our ideas about the problem. Your text discusses the same problem. In which chapter can we find facts about soil erosion?" After the chapter title and page are located, the teacher proceeds: "We discussed some of the main causes and effects of erosion. Does your text discuss them? How can we find out quickly?" If the students are not sure, they may be asked to read the introductory paragraphs or the summary or to note the visual cues. As was true of the preface and introductory material, silent reading may be asked for, guided by a single question: "What are the main points discussed in this chapter?" Or the questions may be more detailed. Short introductory paragraphs may be read out loud by a student or the teacher.

When a chapter contains charts, graphs, diagrams, maps, or pictures, the teacher should ask specific questions which can be answered by correctly interpreting these materials. A useful method for handling this part of the chapter survey is to divide the class into groups of three or four and ask the whole class one question. For example, "The graph on page 37 shows the value of crops lost each year because of floods. The

figures in the left margin are the years. The figures at the bottom show the value. Answer these questions from the graph: (1) In which year were losses heaviest? (2) In which year were losses smallest? (3) Which year appears to be average? (4) What main conclusions about flood damage have you obtained from the graph?" The first three questions, directed to different groups after they have studied the graph, should produce uniform answers. The answers to the last question indicate the extent to which the students have grasped the significance of the information and how much further assistance they need. Whenever new graphic materials are introduced, the teacher should devise appropriate methods to insure their accurate interpretation.

STUDENTS LEARN TO READ MORE EFFICIENTLY

Some college teachers claim that high-school teachers do not teach students to read rapidly with meaning; high-school teachers in turn hold the elementary schools responsible for failing to do a good job; they in turn say that the child's home conditions were such as to prevent his being taught to read well; finally, the parents quite properly maintain that the schools failed them when they were students so they cannot do a better job with their children. Thus, the vicious circle is closed, but nothing is done to improve the situation.

The fact is that most students learn to read about as well as can reasonably be expected in terms of their intellectual capacities, of reading's present low status resulting from television and the many forms of active recreation, and the size of classes at all school levels. If students in Grades 7–12 are to improve in reading as much as they could, high-school teachers must help positively rather than assume that students have already learned to read perfectly or that they will do so incidentally without specific assistance. Most junior high-school students and many in the senior high school need to learn how to improve their word recognition skills, to read with meaning, to use the dictionary and other references, to do oral and recreational reading, and to locate, use, and evaluate information (Fig. 12.9).

WORD RECOGNITION SKILLS

Some students can identify almost any word they find in any reading material used in the classroom. Others need the same kind of intensive

instruction that elementary teachers give in the intermediate grades.

The principal word identification skills, other than using the dictionary, that adults as well as young people use when they do not recognize a word are use of (1) the context, (2) structural analysis, (3) phonetic analysis, and (4) combinations of these. Using the context involves reading the phrase, sentence, or paragraph which contains the new word as a means of trying to grasp its meaning and then its correct pronunciation. In structural analysis, the word is divided into syllables to identify the parts that are known; these parts are then pronounced and then combined into the entire word. Phonetic analysis involves saying the syllables of the word, including individual letters. No one can identify new words unless he can pronounce the letters of the alphabet. Because the pronunciation of many words differs from the aggregate pronunciation of each letter in the word, a combined attack is usually employed—using the context, breaking the word into syllables (structural analysis), and using phonetic analysis (sounding the letters and syllables). The following quotation illustrates the various methods:[1]

Fig. 12.9. What type of instruction in reading do students in a group like this need? (This and Fig. 12.10, Madison, Wisconsin, Public Schools.)

> Bill . . . recognizes at sight all the words in the sentences except the new one which is in italics; he uses the verbal context to attempt to get the correct meaning of the word. Knowing the prefixes and suffixes that appear frequently in printed materials, he looks for the base word and divides the word into syllables (structural analysis). Knowing the sounds of single consonants, speech consonants, consonant blends, and vowels (phonetic analysis), he uses these when he encounters a new word. How do these skills enable Bill to identify a new word?
>
> Because he knows the word *rip*, a combination of context, structural analysis, and phonetic analysis makes it possible for him to identify the following italicized words:

[1] Herbert J. Klausmeier, Katharine Dresden, Helen C. Davis, and Walter A. Wittich, *Teaching in the Elementary School*, New York: Harper & Brothers, 1950, pp. 213-217.

Susan *sips* the water.
Bill *clipped* the grass.
Henry is *chipping* the stone.

Many other words might have been used. Different initial sounds were used to illustrate phonetic analysis, and suffixes were used to illustrate one aspect of structural analysis.

Similarly, Bill should be able to identify an unknown word in a compound word quite easily.

The *postman* brought the mail.
The *stableman* saved the horses when the barn caught fire.

In these two words, the last syllable is usually recognized first.

Suppose Bill knows the root word *taste*, knows commonly used prefixes and suffixes, combines prefix or suffix with the root word, and uses the context. He should identify these italicized words:

Mary *tasted* the candy.
The fruit cake was *tasty*.
Mary looked at the broken egg with *distaste*.

Other words such as *unknown, rewrite, dislike, sublet, default, doubtful, farmer, lifeless,* and *shortest* may be identified when the single-syllable root word and common prefixes and suffixes are known. So also with root words of two or more syllables as in *containment, inability,* and *transcontinental*.

Suppose a new word, such as those below, does not contain a root word which Bill knows. He uses structural analysis for the pronunciation units or syllables, picks out familiar suffixes and prefixes, uses phonetic analysis for the sound of letters and syllables and blends the sounds into the pronunciation, and uses the verbal context. Unless each word is already in Bill's speaking vocabulary, he will need certain generalizations about accent to arrive at the correct pronunciation.

The *exhaust* pipe sprung a leak.
Permit me to use your pencil, please.
The queen rose in all her *dignity*.
The *firmament* was bright with stars.
John scored his lone point at a *crucial* moment.

High-school students vary widely in their ability to identify words. Some need to be taught phonetic analysis, others structural analysis, some need instruction in all phases. Too few of our high-school teachers today are prepared to teach this well. Their courses, including student teaching, gave no attention to this important aspect of teaching at the high-school level. A teacher who does not know how to teach word

identification and other reading skills should learn to do so rather than omitting this important phase of instruction.

READING WITH MEANING

Understanding what one reads is the best assurance that it will be remembered. Poorly understood materials must be memorized if they are to be reproduced, and they are forgotten quickly. Students vary widely in ability to comprehend; most of them, however, can be taught how to improve their reading comprehension. Some procedures will be directed mostly by the teacher; others may be devised so that the students learn to help themselves. Practice to increase reading comprehension should be included at appropriate intervals in the general class activities rather than set up as unrelated drill.

Practice for comprehension must be adapted to what is being read. Material of the kind usually contained in textbooks is generally aimed at presenting and clarifying a number of basic concepts, generalizations, or processes. The major tasks in finding the meaning of such material are to identify the major concepts, to finish reading it in a short enough time to be able to grasp the relationships necessary in understanding the generalization, and to organize the material into a meaningful pattern which will be remembered. Several types of practice are suitable for this type of material.

Practice for Paragraph Meaning

The paragraph is the basic structure for conveying unified ideas. Paragraphs may define, illustrate, present details, or show comparison and contrast or cause and effect. The latter two are most useful in beginning this practice. Select paragraphs which are complete in themselves. Distribute these to the students in mimeographed form or refer the students to the book itself. Introduce the practice period with a question related to the paragraph. Ask the students to read the paragraph and then to write down their answer. Variety may be obtained by having the students write a telegram that conveys the meaning of the paragraph, presenting multiple-choice items from which the student chooses the correct one; and having a brief class discussion of each paragraph. In all these cases, the practice is designed to help the student grasp the central idea in the paragraph.

Paragraphs are based one upon another to present a more complete statement of a topic. Usually, a series of paragraphs must be read to understand a topic. In practice for unit meaning, select short topical paragraphs that are relatively complete in themselves and can be read in five or ten minutes. Formulate a series of questions whose answers lead to understanding the major concept, generalization, process, or event. Ask the students these questions after they have finished the reading. The questions may be similar to those given for paragraph meaning. For diagnostic purposes, each student's answers must be checked. Sociodrama, panel discussion, and general class discussion may also be used in helping the students determine whether they got the intended meaning from their reading.

In attempting to organize whole-class practice of this nature, the problem of individual differences in reading rate immediately arises. Some students read twice as fast as others. One quite inadequate method for handling this difference is to have the students stop reading at a certain time. Each student marks the place where he stopped and answers the questions covering that much material. This procedure leads the slower reader to become excited or to "skim over" the material. It does not work if students' grades in the subject on that day are based on the number or percentage of correct responses.

Similarly, these individual differences make whole-class practice of practically no value as a means of increasing the reading rate. Individual periods should be provided in which to practice focusing the eyes on the page, moving from the end of one line to the following line, and using punctuation for grouping words—three factors important in reading rate.

Practice for Vocabulary

Vocabulary practice may be held before or after the reading assignment, depending on how many new words are introduced and how well their meaning may be understood from the context. If the new terminology was discussed before the reading, the vocabulary practice should follow the reading. If the material to be read contains key words that are not well explained, such words should be discussed before the reading is done.

Vocabulary practice before the reading may follow this procedure: "Here is a list of words which appear in the reading assignment. Underline each one that is new to you. Find the dictionary meaning of these words before you commence reading." If the list is long or if dictionaries are not available for each student, the class may be divided into groups to discuss the words, or there may be a general class discussion.

While reading, each student may underline or write down each word he does not understand. In this case, the words may be looked up in the dictionary immediately after the reading, or be discussed by the whole class. Making lists of new words and recording the number of new ones learned each week on a chart encourages students to continue the process independently.

Fig 12.10. How may library assignments be correlated with student practice in class to improve vocabulary and concentration?

Practice for Concentration

Reading with concentration becomes easier if it is related to a specific purpose. A question that is to be answered on the basis of what is read arouses interest, gets the student started immediately, and keeps him at work until the question is answered.

Specific practice can be devised for improving concentration. As with practice for unit meaning, choose selections which are relatively short but complete in themselves, or ask the students to secure material from the library (Fig. 12.10). Discuss with the students the need for them to read in order to answer a specific question. As soon as the question is formulated, the students should begin reading. For maximum concentration, there must be no distracting and interrupting influences; the students should not walk around, talk with each other, sharpen pencils, or

get paper and other materials. Asking a question, discussing a point in the material being read, or scolding a student for his conduct interrupts concentration for the whole group.

Concentration increases when the classroom activity and the reading done in connection with it are related to the students' more immediate personal interests, such as being asked to join a club, securing a job, getting along better with his classmates and teacher, insuring success in school, being satisfied with his performance of some activity, or making an important discovery. Encouraging students to concentrate so that they will have more time for social and recreational activities is also effective.

As with practice of any kind, the material used in practicing for concentration should be neither too short nor too long, too easy nor too difficult. If they are to concentrate, students must feel that they are making progress. Long, difficult selections that are impossible to read with sustained attention definitely discourage concentration.

USING THE DICTIONARY AND OTHER REFERENCES

An unabridged dictionary is valuable as both a source of information and an aid to reading. Used properly, it helps students to find word meanings, thus improving reading comprehension; it helps them to pronounce correctly, thus improving verbal expression; and it helps in spelling, syllabication, and punctuation, thus improving written performance.

If time is available, a quick survey of the various parts of the dictionary may be made the starting point for learning how to use it. Many dictionaries have sections on syntax, etymology, punctuation, and maps; many include a list of the principal cities in the world, abbreviations, a list of words related to specific subject areas, and a phonetic key.

The following is a relatively simple way to help students identify word meanings: Select and list certain words from an assignment. Give the students these lists, and have the pupils write in the definition and three or four synonyms for each word. Then have the students begin to read. As they come to each of the words, they are to check the definition or synonym which most nearly fits the word in the particular context. This assumes that the students can find words quickly in the dictionary.

Each student must have a copy of the dictionary in practicing to use it for correct pronunciation. For this practice, select words from a reading assignment or those likely to arise in a class discussion; make certain

Fig. 12.11. Most students require expert assistance in using reference books. Which high-school teachers might also need it? (Richmond, Virginia, Public Schools.)

that the words selected can be used to teach syllabication and diacritical marks. Have the students look each word up in the dictionary, refer them to the key to pronunciation, and provide practice in using the key.

The dictionary is infallible for discovering whether a word is spelled correctly. However, this is difficult for many students because they cannot locate a word. The English language is so nonphonetic—e.g., the sound *sh* is spelled in some twenty-one different ways—that spelling may be difficult, even for adults. A major task in helping students find a correct spelling is getting them to persist until they find the word. Assistance from the teacher must be available, particularly when a student becomes discouraged and quits. For words that are reasonably easy to spell, the dictionary is useful for such information as using diphthongs correctly, dropping or adding a letter with prefixes and suffixes, capitalizing and using the hyphen.

The following reference books should be available in addition to a

dictionary: An atlas, an encyclopedia, a **U.S. Census Report**, *Who's Who*, and *World Almanac*. Larger libraries have many other reference books for specific subject areas.

The reference books which will be used most frequently should be previewed in the classroom, as the dictionary was. Here the purpose is to become familiar with their organization, to be able to find specific information in each book, and to determine which one is most valuable for securing a particular type of information (Fig. 12.11).

After the general survey, specific assignments may be given. Depending upon the students' familiarity with the reference books, the assignment may include such questions as: (1) What is the latitude and longitude of the capital of Iran? (2) Which countries lead the world in the production of oil? (3) How much did the population of the United States increase between 1930 and 1940? (4) What contributions did Cordell Hull make to American foreign policy? In this assignment, the students must be helped, when necessary, to select the best source and to find the information in it. For a class with little practice, it is better to investigate one reference book at a time and give assignments that call for locating specific information in it.

ORAL READING

Instruction in oral reading in junior and senior high school is usually given in connection with other class activities. Teachers are careful not to ask a student to stand at his seat or come to the front of the classroom for oral reading when his appearance or self-consciousness leads to embarrassment, and hence a possible dislike for oral reading. While their voices are changing, many boys refuse even to talk in the classroom, much less read a selection to the class. With these considerations in mind, most teachers put instruction in oral reading on an informal and voluntary basis (Fig. 12.12).

Choral and responsive reading is also used widely. A student who is identified with his group and is trying to make their contribution good tends to forget himself. Adolescents generally respond to group suggestions more favorably than to individual suggestions. Thus, pronunciation, enunciation, reading rhythm, and tone can be handled well during group reading. Moreover, the students themselves can often give each other valuable suggestions for improvement. Tape recording a group reading

and then playing it back for evaluation is a constructive means of improving oral reading.

RECREATIONAL READING

The most important criterion for selecting recreational reading material is that it be interesting and meaningful to the student. To encourage reading for recreation outside of school, time must be given during the school day for this type of reading. Here are two "lessons" in reading for recreation.

The first teacher says: "Turn to page 23 where you will find a story about the Pony Express, written by Mark Twain. Read as much as you can until I tell you to stop, and then we shall discuss it." The students read for twenty minutes while the teacher corrects papers. At the end of the period he asks these questions:

Fig. 12.12. Why should oral reading be on a permissive basis? (Cleveland, Ohio, Board of Education.)

What was the Pony Express?
Between which states did the Pony Express run?
What was carried by the Pony Express?
How far were the letters carried?
How much did it cost to send a letter?
What kind of saddle was used?
How long did it take to change horses?
What were the main dangers faced by the riders?

Following the question-and-answer recitation, the students are given a test. They know that their score on this test will be used with their scores on other tests in determining their mark for the grading period.

The second teacher starts differently; he says to the class: "We have studied how messages are sent by telephone, telegram, and radio. Now let's imagine that we lived before any railroads, telephones, or telegraph lines connected the Mississippi River region and California. How would we have sent a letter from St. Louis to San Francisco? There's an inter-

esting story in your book about this. And it is humorous. If you find something that makes you want to laugh, mark the place so that we may share it. If you finish reading before some of the others, go ahead reading in one of your library books."

Having established a purpose for their reading, set a favorable tone, and provided for differences in rate of reading, he helps individual students when they come to new words. When all the students have finished, a discussion follows, stimulated by such questions as:

Which parts of the story did you find humorous?
Would you have liked to make the trip with Mark Twain?
Would you have liked being a pony rider?

Throughout the entire period this teacher shows enthusiasm, enjoys the humor with the students, and listens carefully to what they say. In all his actions and words, he demonstrates that he enjoys reading for recreation, makes the learning environment pleasant for the students, and encourages a desirable attitude toward this type of reading. The teacher's guidance of recreational reading makes it as interesting, at least for some students, as watching television and athletic events, "just talking," or swimming.

LOCATING, USING, AND EVALUATING INFORMATION

Next to textbooks and supplementary books, dictionaries and reference works, the library is a very important source of information. No teacher should assume that the high-school student knows how to use a library or that he can evaluate well the information he secures there. On the contrary, many people need assistance in locating, using, and evaluating information throughout life. This is true of even the most advanced graduate students.

Use of the Library

To instruct students about securing library books, the teacher may use the following procedure: Bring to class exact reproductions of cards in the card catalogue, and distribute these to the students. *Discuss* one of these cards, noting the information it contains about the book—call number, author, title, subject, date of publication, number of pages, illustrations, etc. Emphasize the significance of the call number. Next,

identify the three types of cards—author card, title card, and subject card—so that the students know which to look for in terms of the information they possess. Then take the students to the library to examine the card catalogue. Ask each student to find in the catalogue the cards that are identical to his author, title, and subject cards. Next, take them to the stacks and tell them how books are located by their call number. Ask each student to find the book designated on his cards.

The periodical literature index is similar to that of the card catalogue except that no numbering system is used and the identifying information is printed in a book. The *Reader's Guide to Periodical Literature* is usually available in the larger high-school libraries in an abridged edition. The *International Index to Periodicals* is frequently found in community libraries. The *New York Times Index*, important for newspaper stories, and special guides like the *Agricultural Index* and the *Dramatic Index* are to be found only in larger libraries.

To acquaint the students with the *Reader's Guide to Periodical Literature*, bring copies to the classroom; include yearly and supplementary volumes. Examine its organization. Have each student find an article that is closely related to the topic being studied. (Make sure that the library has the periodical.) Accompany the students to the periodical room to make sure that each one finds the article he has chosen. This is especially important in libraries where more recent articles are kept on the shelves and older ones are bound. The card catalogue is required for finding the call number of bound volumes (Fig. 12.13).

Fig. 12.13 Using the card catalogue to find books is essential to using a large library well. (San Diego, California, City Schools Photo.)

After the students understand the card catalogue and the guides to periodical literature, they may be given a broader assignment. Thus, during UNESCO Week committees may be formed to secure information about UNESCO—its organization and functions, the services it provides, and the like. The library is visited, and possible sources of information

are listed; they are checked in the particular committee or with the teacher; each student then secures the material. The various articles, books, and pamphlets are evaluated in class. An advanced group may make its own evaluations in committee and report them in class.

Critical Evaluation

Up to this point, the major emphasis has been given to procedures that will help the student locate and get ideas and meaning from what he reads. Another competence important in reading is to check the ideas and information obtained from one source with one's own ideas and with other sources. Practice in evaluating critically what is read is illustrated by the unit in tenth-grade English in Chapter 7.

You will recall that, after securing the students' attention and defining some of the main values to be gained from a study of English, the teacher and the class worked in committees to prepare for an assembly presentation. As you read about the specific activities, you probably asked questions such as these: (1) Does a circular arrangement of seats focus attention on the teacher and put students on their best behavior? (2) Do students suggest the more important values to be obtained from a course? (3) Were the problems—using the telephone, making introductions, dating, and carrying on a conversation—closely related to making friends and also to developing oral communication skills? (4) Can a class be organized effectively into committees during the first or second week of school? (5) Is some other technique more effective than small-group work for studying the above problems and acquiring communication skills while doing so? (6) Does a tenth-grade class like to present dramatizations, cartoons, and printed materials at an assembly?

On the basis of your experiences in classes from elementary school to college, you evaluated the procedures by asking questions like those just listed. If you recalled several related experiences that worked well, you decided the procedure was good; if you had many unpleasant experiences, you perhaps decided that the procedure was not good or else you analyzed the situation more closely to discover how it might have been organized better. You also probably checked your ideas in discussions with others and by reading other textbooks.

Many books used in preparing to teach in secondary schools have sections or chapters on planning units. Methods books in particular sub-

jects or fields such as social studies and English frequently stress the logical organization of subject matter as the basis for planning. General methods books often stress a particular teaching method—the Dalton plan, the Morrison method, the project method, the problem-solving method, for example. In the framework for a teaching unit in Chapter 6, student activities were given major attention in line with the idea that learning is an active process and that subject matter, methods, and materials should be utilized which make it meaningful for the students. Is this a sound basis for planning and teaching? Besides checking your own experiences in relation to this question, you might read a discussion of unit teaching in a methods book in your major field and your minor field, and also in a general methods book to evaluate the materials presented. Your evaluation might be guided by such questions as: (1) What facts are presented? (2) In what respects is the material alike? (3) In what respects does it differ? (4) Which books encourage the reader to accept the material without examination? (5) Which encourage him to test the conclusions?

Comparing for accuracy with one's own experiences, comparing different treatments of the same topic, and discussing material with classmates, teachers, and other adults are the main techniques by which high-school students can evaluate what they read.

At this point in the discussion of how to help high-school students improve their reading you may feel that the examples given were too specific and left little to the resourcefulness of these students and their teachers. Preparation for teaching in secondary schools gives little attention to the necessity for competence in aiding students with reading and writing.

STUDENTS LEARN TO WRITE BETTER

Not only English teachers but every teacher whose students do written work should be concerned with assisting them to write good sentences and paragraphs, as well as longer pieces. This must be done without discouraging them. As with reading, it is not enough simply to tell them to write well; they need assistance that is at the appropriate level. Most students need instruction in mechanics—capitalization, punctuation, sentence structure, use of words, spelling—and also in various forms of writing. For the most part, this instruction is provided out-

side the English class in connection with current class activities in which the students are required to write.

The following two instructional guides—the first applying to composition, the second to paragraphs—have proved helpful to some university students. They were prepared for use in English classes, Grades 10, 11, and 12.

SUGGESTIONS TO IMPROVE YOUR WRITING [2]

The following suggestions are made because the errors stated or implied are found too frequently on student papers.

If you study the suggestions, analyze your own sentences, and follow the recommendations, your writing will improve.

1. When you use the verbs *suppose* or *ask* or *use*, check carefully the tense your sentence implies. You will find that frequently the past tense of the verbs mentioned above is needed: *supposed, asked, used.*
2. Study the correct use of present perfect and past perfect tenses. Many students do not show the proper sequence in tenses.
3. Do not overuse the helper *would*. Frequently the simple past tense should be used instead.
   Poor usage: Often he would remind us that education is our business.
   Correct usage: Often he reminded us that education is our business.
4. Do not use future tense of a verb when you can use present tense.
5. Verbs of action are usually more effective than state-of-being verbs.
6. Substitute meaningful verbs for *get, got, said.*
7. Substitute a specific word for *thing* or *things.*
8. Do not overuse the words *very* and *truly.* Frequently sentences are more effective without these words.
9. Unless you are writing in conversational style, do not use *you* and *your.* Instead, use such words as *one, a person, some people.*
10. Do not use trite expressions such as *and everything, each and every one, last but not least, all in all.*
11. Do not use *a lot* or *lots of.*
12. Do not overuse *it, this,* and *that.* Rather, use a specific word.
13. Do not overload your sentences with adjectives or adverbs. Use effective verbs and nouns. Frequently, one well-selected adjective is more effective than are two adjectives; two, more effective than three. (The suggestion applies also to adverbs.)
14. Use specific words instead of *such a kind* and *and such.*

15. Substitute meaningful words for such expressions as *neat, swell, beautiful, nice, fabulous, wonderful, lush.*

16. Instead of using compound sentences with *and*, *but*, or *so*, try to subordinate the less important idea by placing it in a subordinate clause, phrase, or a single word (appositive).
    Poor sentence: I am going to the game, and I shall see you there.
    Improved sentence: I shall see you at the game.

17. Try to vary the beginning of some sentences by using adverbs, phrases, or dependent clauses. (Subject-verb-complement sentences throughout a composition become monotonous.)

18. Be sure that each pronoun has a definite, one-word antecedent. You may need to revise the sentence (as in third sentence below).
    Incorrect usage: When reading, skim through it first.
    >> In the poem *it* states . . .
    >> I shall appreciate *it* if you will send the order immediately.
    Correct usage: In reading, skim through the article first.
    >> The poem (or the author) states that . . .
    >> I shall appreciate *your* sending the order immediately.

19. In defining a term do not use *when* or *where* without an antecedent immediately preceding.
    Poor sentence: A library is *where* books . . .
    Correct sentence: A library is a room or building where books . . .

20. Unless you are writing in conversational style, do not use contractions.

21. Eliminate *etc.* from your writing.

* * * * *

THE PARAGRAPH

[Parts I, II, and III of this guide gave instructions for writing and correcting the first draft.]

Finally, the student should reread his paragraph aloud and ask himself these questions.

1. Does each sentence say something and add to the development, or is it simply a mess of words?
2. Is the content clear and convincing?
3. Do the sentences follow others logically?
4. Is the paragraph interesting?
5. Is there smooth transition between sentences?
6. Has a variety of transition words and phrases been used?
7. Does the paragraph accomplish the intended purpose?
8. Is the vocabulary specific, vivid, and appealing, or is it general, dull, and trite?

9. Are there unnecessary words?
10. Are there empty words?
11. Is there ineffective repetition?

The following draft shows a paragraph after much revision by the student:
"A room like hers would make any girl happy. Although it is not large, the room gives the feeling of spaciousness because the windows, taking up nearly the whole east side of the room, allow an ample view of the sparkling azure sea and bright tan beach. Light-green owls blink sleepily from the violet background of the curtains, which swish and billow in the sea breeze. Paneled in mahogany, the door and the walls give a faintly pungent, woody scent to the room. Matching the pink, slatted closet doors are the chenille spreads on twin beds; on each sits an overstuffed pink pig wearing a supercilious smile. The shining pink linoleum floor is speckled with charcoal and white dots. The night table, beds, and chest of drawers are of finely grained wood, functionally styled. On the night table are a small, gold and white alarm clock, adorned with rosebuds, and a lamp made of driftwood. A slender pink vase holding a single, long-stemmed rosebud stands on the dresser-top with two jewelry boxes patterned in inlaid wood and three delicate perfume bottles. Pink and feminine, the room delights her."

    a. The paragraph has more unity, and the topic sentence is more fully developed. [This refers to the first draft, omitted here.]
    b. Effective transition words have been used.
    c. Sentence structure has been varied to make the reading less monotonous.

IV. Polishing the paragraph
    After the student has rewritten his paragraph, he should go over it carefully to see whether he can improve it. Most writers allow their work to cool before submitting it for publication. The student should allow his paragraph to cool at least twenty-four hours.

V. Revising the paragraph
    Even though the paragraph has been polished, the student must carefully revise his paragraph after it has been handed in and graded. The following shows the paragraph after it has been graded by the teacher and revised by the student.

"A room like hers would make any girl happy. Although it is not large, the room seems spacious because the windows, taking up nearly the entire east side of the room, allow a view of the beach and the sparkling sea beyond. From the violet background of the curtains, which swish and billow in the sea breeze, light-green owls blink sleepily. Paneled in mahogany, the walls exude a pungent, woody scent and complement the functionally styled beds, night table, and chest of drawers. Chenille spreads match the pink, louvered closet doors; and from the foot of each bed a black, overstuffed pig smiles super-

ciliously. Dots of charcoal and white speckle the pink linoleum floor. On the night table stand a small gold and white alarm clock and a lamp made of driftwood. A slender pink vase holding a long-stemmed rosebud adorns the dresser top. Pink and feminine, the room delights her and her friends."

The above guide may be too advanced for most junior-high-school students and for many in the senior high school. Also, some teachers are perhaps less qualified than Mr. Williams to teach students to write description. However, every teacher should at least attempt to help his students write better.

STUDENTS ARE HELPED WITH STUDY AND WORK SCHEDULES

Most students have many hours of relatively free time each week. These students, like those whose time is taken up with many activities, can profit from help in learning to manage their time. Some students may resent such help, but others appreciate it.

The teacher may give the student a form on which he is to record his activities at least during the school week, and preferably also week ends. This form shows class periods during the school day and indicates hour periods after school. The teacher meets with individual students or with small groups and explains the purpose of the form, helps them fill it in at the beginning of the week; he goes over it with them toward the end of the week or on the following Monday. This helps each student decide whether he is giving enough time to study. Generally, students have more time for recreation and feel more comfortable about their school work when they stick to a plan for getting the necessary work done. Incidentally, this procedure enables the teacher to discover students who are doing too much—perhaps carrying an outside job, taking part in too many cocurricular activities, and coping with too long and too rigorous assignments given them by different teachers.

STUDENTS WHO HAVE SERIOUS PROBLEMS ARE GIVEN SPECIAL TREATMENT

Of the 100 or more students that a teacher may have each day, there are usually several who cannot profit from the best instruction in classes containing 30 or more pupils. Some need special help that cannot be given by the regular teacher. Of the many provisions for students with

special problems, only three are described briefly here; a more complete discussion is given in Chapter 15.

In larger schools, the students who are seriously retarded in subject-matter areas, particularly reading, are not assigned to regular English classes. Those severely retarded in reading, for example, are placed in special classes where they will receive the developmental reading instruction they require. In the smaller schools which cannot afford a special teacher, the growing practice is for the English teacher to identify the three or four most retarded readers in each of the five sections in sophomore English, for example, put all these retarded students together in one section, the other four sections necessarily increasing in size. This practice is more economical of the teacher's time and provides better instruction for all the students. Parents and students will not only accept it but give it strong support when the reasons for it are clarified and the results are good.

In this country as a whole, children with IQ's ranging from 55 to 80 are now in special classes in elementary schools instead of in institutions, and special classes are being increasingly provided for mentally retarded youth at the high-school level. Although this is expensive, society has generally accepted the idea that if schooling until they are eighteen can help the mentally retarded but educable become self-sufficient, it will save the money required if these young people were committed to institutions for their entire life, but, more important, it will salvage a great many people for whom help is worth while.

Emotionally disturbed and antisocial students, including the delinquent, are given special treatment in some communities. The emotionally disturbed are hospitalized or, when possible, given therapy that will enable them to remain in school. The antisocial and the delinquents receive specialized counseling and other similar help at home and in the community. Furthermore, a great many senior high schools are notifying parents that their children must obey school rules or be expelled. Although this is not always done with students with undesirable home conditions, it seems to be having the desired effect in some communities. Though fully recognizing that conditions at home, in the neighborhood, and in school are more often responsible for antisocial conduct than the characteristics of the individual student, the author believes that punishment is necessary at times. It is not reasonable to permit a few students

to disrupt classes, commit serious delinquencies, damage the reputation of classmates, or flout the authority represented by teachers and other school people.

SUMMARY

To study efficiently, a student must be ready for it, know what to study, have a desirable place and the necessary materials for study, and know how to go about it effectively. In many classrooms, this means that the teacher first considers the readiness of his students and increases their readiness in relation to particular activities. The physical environment—the classroom—is made conducive to study, the work is interesting, the student understands what he is to do, and the teacher pays attention to how as well as to what to learn and study.

Students must be taught to use a textbook and supplementary materials well just as they are taught to use a sewing machine or some other tool. Whenever reading is called for, the students need instruction on such details as recognizing new words, finding the meaning intended by the author, using the dictionary and other reference works, reading aloud, reading for recreation, and locating, using, and evaluating information. The teacher should not assume that students in Grades 7 to 12 can do all these things perfectly; all need help, some much more than others.

Writing can and should be improved through instruction by all teachers, rather than being the province of the English teachers. Teachers also need to work with students on making study and work schedules. There are, of course, limits to what any teacher can do with several large classes; therefore students with serious problems in reading, writing, or other fields should be identified and special treatment provided.

Questions and Activities

1. Observe three or four students in a high-school or college class. For each one, note (a) the exact amount of time taken in getting started, (b) the amount of time actually spent in work, (c) the amount not used for work, and (d) how materials and tools were handled.
2. List and state briefly the five readiness factors and the teacher's role in relation to them.

3. Discuss how the four situational characteristics affect students' work methods in the classroom. Which of these can the teacher control most effectively? How can this be done?

4. Using this or some other textbook, appraise the procedure for previewing a textbook.

5. Secure a textbook used in a high-school class in social studies or literature. Can you obtain an overview by following the procedure described for surveying a chapter? Could the students for whom the textbook is intended?

6. List the three main word recognition skills. In which are you most proficient? Least proficient? Why?

7. At what grade level and in what classes is practice of the type suggested for securing meaning from paragraphs and units feasible?

8. List the conditions which may keep adolescents from concentrating. What can a teacher do to help students here?

9. Describe a method for helping students evaluate critically what they read.

10. What are the principal uses of the dictionary and other reference books in high school? Which of these books should be kept in the classroom?

11. List the reference books with which every teacher should be familiar. Outline procedures for surveying each one, and, if possible, demonstrate them.

12. Discuss the skills most important for students in using the school and community library efficiently. What do you consider the best method of teaching this?

13. Compare the help you received in writing in high school and college. Which was more helpful? Why?

14. How can students with serious problems or handicaps be best helped when a teacher has four or five large classes?

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PART IV

Expanding
Responsibilities
and
Challenges

In many ways gifted children are like other children. Gifted students in junior and senior high school should not be denied the opportunity of normal associations with other students, but at the same time they should be identified and helped to develop their talents. Cutts' philosophy, as expressed in the following quotation, is worth study.

> It is essential to keep a sane perspective when you are thinking about the bright and gifted. Reflect that you yourself are at least bright. You are presumably a college graduate. You are engaged in a professional career. You are rendering superior service. You associate on equal terms with others who are bright and gifted.
>
> Remember also that bright and gifted children do not spring full grown from Zeus's brow like Athena, the goddess of wisdom. They are children, subject to the frailties and insufficiencies of childhood. Like all children, they lack experience, they lack judgment, they are physically and socially immature. Given proper care at home and skilled teaching in school, they do develop physically and mentally more quickly than other children, and eventually they may surpass their parents and teachers in knowledge and achievement. But attaining full development is a long process for even the most gifted child. Like your other pupils, your bright and gifted need your affection and support. Give them these and they will be grateful.[1]

These ideas will become more apparent in the discussion of the following generalizations:

1. The demand for gifted individuals is great.
2. The goals determine the procedures.
3. Identification is continuous and systematic.
4. High motivation is needed.
5. *Administrative* and *overall curriculum provisions are varied.*
6. Enrichment of learning activities is essential.
7. Community resources are used.

Suggestions made in earlier chapters will not be discussed further except when necessary to indicate procedures adapted to identifying, motivating, and providing well for gifted students.

[1] Norma E. Cutts and Nicholas Moseley, *Teaching the Bright and Gifted*, Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1957, p. 3.

In this rapidly changing world, every talent any individual has must be developed.[2] Where are we failing to do this at present? Why is there a continuing shortage of talented, well-educated adults? In what areas are the needs greatest?

Few will claim that our public schools or any other segment of modern society is perfect. Although we can and must improve the education of the gifted, statements that attribute the great neglect of gifted students to the public schools are not based on complete research findings. According to Dael Wolfle:

> While shortages plague the nation's employers, the United States is wasting much of its intellectual talent. College graduating classes could be twice as large as they currently are, and with no loss of quality. Every study which has been made of why and when and how many students drop out of school has shown that the potential supply of well-qualified college graduates gets drained off, in large or small amounts, all the way through the entire educational system. Practically all the potentially well-qualified enter high school, and most of them graduate, but after high school graduation the loss is large. Fewer than half of the best 25% of all high school graduates now graduate from college. Only 6 out of 10 of the potentially promising 5% of high school graduates earn college degrees.[3]

Although, after a five-year study, Wolfle found loss throughout the educational system, it is interesting to note that practically all the well-qualified students enter high school and most of them graduate, but after this their numbers decrease. Four factors are important in this connection.

1. The birth rate was very low during the early 1930's. This means that in relation to other age groups, there are now relatively fewer young people in the age group 18 to 24. The Bureau of the Census' *Current Population Reports* for February, 1956, states that on July 1, 1955, there were roughly 15.1 million persons 18 to 24 years of age, compared with 16.0 million in 1950, 16.6 million in 1940, and 15.5 million in 1930.

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[2] Herbert J. Klausmeier, "America Needs the Gifted," *Wisconsin Journal of Education*, December, 1956, pp. 3–6. A more detailed discussion is presented in this article.

[3] Dael Wolfle (ed.), *America's Resources of Specialized Talent*, New York: Harper & Brothers, 1954, p. 8.

Looking toward the future, the same report estimates an increase of about 33 and 75 percent above the present figure by 1965 and 1973, respectively. In other words, in 1956 we had the lowest population aged 18 to 24 that we have had since 1930, but the number will increase markedly by 1965.

2. Though the low birth rate persisted until about 1940, it has been very high since 1945. This means that each year there are more children in the young age groups. Moreover, more people are living beyond age 55. This and other factors have led to a rapidly expanding population, characterized by high production. High production means an increased demand for well-educated, talented persons—in the production and distribution of goods, for various services, in government, labor, and industry—in short, in all areas of human activity.

3. Specialization of labor has rapidly increased. In manufacturing, in transportation, in communication, in professional services, in all areas greater knowledge and higher skills are demanded. Thirty years ago, our schools had no television, no jet planes roaring overhead, few supplementary textbooks, few if any facilities for using motion pictures, few good tests, fewer children with anxieties and other personal problems, fewer children from transient families. Just as a good teacher today needs a much higher degree of specialization, so also do other professions, industry, labor, and government.

4. The military services take most if not all of our young men who are able-bodied and mentally fit, for training that lasts from six months to three years or over. Although this is a necessary element in our national defense, it depletes our present already short supply of young men age 18 to 24; moreover, many of them will not go into the careers they prepared for. While there will be a much greater number of young people in the near future, the need for adults with highly specialized skills requires that the talents of all high-school students be developed.

The larger national pattern of the need for specialized talent is presented in Table 13.1. Note that there is greater need for school teachers than for people in any other field and that the estimated shortage of teachers each year is higher than the total annual demand for engineers. Obviously, the latent talents of children and young people cannot be developed unless there are enough good teachers.

Field	Estimated Number Employed at Professional Level in 1953	State of 1953 Demand	Adequacy of Prospective Graduates in 1953–1957 to Meet Anticipated Demand
Natural sciences	237,000	High	Insufficient at both A.B. and Ph.D. levels
Psychology	22,000	Increasing	Insufficient at Ph.D. level; adequate at lower levels
Social science	47,000	Increasing	Moderate shortage at Ph.D. level, adequate at lower levels
Humanities	114,000	Increasing	Insufficient at Ph.D. level; adequate at lower levels
Engineering	633,000	30,000 a year	Insufficient
Applied biology	246,000	Variable	Sufficient in agriculture and forestry; insufficient in home economics
Health fields			
Dentistry	84,000	More needed	Insufficient
Medicine	185,000	More needed	Insufficient
Nursing	340,000	More needed	Insufficient
Pharmacy	91,000	Moderate	Sufficient
Business and commerce	1,372,000	Flexible	Will absorb many graduates from other fields
School teaching	1,141,000	160,000 a year	Insufficient by 60,000 a year
College teaching	200,000	Increasing	Insufficient
Other professions			
Law	202,000	Moderate	Sufficient
Ministry	168,000	Moderate	Sufficient
Social work	77,000	Variable	Variable
Other professions	118,000	Variable	Variable

THE GOALS DETERMINE THE PROCEDURES

What type of individuals would teachers like gifted children to be as a result of their efforts? This broad question needs to be further defined in terms of intellectual achievement, social competence, and moral values.

1. Intellectual Achievements. (a) Do we want the gifted high-school graduate to be very highly specialized in one or two areas such as mathematics,

[4] Ibid., p. 77.

science, English, art, foreign language, and business education? (b) Do we want a non-specialized individual with some competence in several subject-matter areas and in several expressive areas? For example, do we want the gifted graduate to have two years of work in several areas such as mathematics, science, language, English, and social studies and also some work in music, art, dramatics, home making, business education, agriculture, shop? (c) Do we desire the gifted graduate to have quite high specialization in one or even two areas and also competence in several others?

2. *Social Competence.* (a) Do we want the gifted high-school graduate to avoid others so that he may use his talents exclusively in individual efforts? (b) Do we want the gifted student to be skilled only in working and living with others of similarly high achievement? (c) Do we want the gifted person to find satisfactions in independent work and in communicating and living with others of many levels of competence and many areas of interest?

3. *Moral Values.* (a) Do we wish the gifted person to be unconcerned with the effects of his efforts on self and others? For example, do we want a person so strongly motivated for high achievement that he ruins his own health in the process or is unconcerned with producing a "monster" product or idea that destroys the happiness or endangers the welfare of others? (b) Should the gifted high-school graduate use his talents for personal gain only, taking advantage of those of lesser abilities to achieve economic, social, or political mastery over them? (c) Do we desire the gifted youth to use his talents in caring for his own needs and also to be concerned with improving conditions for effective living for himself and others? [5]

In line with the goals in Chapter 1, the teacher's goal with gifted students should be to identify and develop students who, on high-school graduation, will be rather highly specialized in at least one area concerned with their particular talents, who will find satisfaction in living with other people with varying talents and interests, and who will use their talents to improve conditions for themselves and others. If this goal is accepted, procedures for identifying, motivating, and providing for the gifted will be devised.

IDENTIFICATION IS CONTINUOUS AND SYSTEMATIC

A gifted student is one whose actual or potential achievement in any useful area of human endeavor is consistently superior. This definition sets the main tasks of identification as deciding the useful areas of human endeavor, ascertaining the students whose actual or potential achieve-

[5] Herbert J. Klausmeier, "The Gifted: What Will They Become," *Phi Delta Kappan*, December, 1958, pp. 112–116.

ments are superior, and finally, continuing the identification procedures in Grades 1–12.

USEFUL AREAS OF HUMAN ENDEAVOR

Rather than debating the values of various subject and co-curricular offerings, the teacher will do well to accept the idea that every subject-matter area can and usually does contribute to an exceptional student's superior achievement as an adult (Fig. 13.1). Therefore the student who is consistently superior in one or more areas such as arithmetic, art, dramatics, business education, foreign language, English, social studies, or science, is demonstrating talent which should be identified and developed further. Most of these superior students have relatively high IQ's compared to the lower-achieving students, and most of them also show superiority in several areas rather than in one. But if a student's superiority is confined to a single

Fig. 13.1. Does one of these areas of learning contribute more than another to a student's eventual achievement as an adult? (Top, School District of the City of Berklye, Michigan; center, Society for Visual Education; lower, School District of Philadelphia, Pennsylvania.)

field (such students are sometimes referred to as talented rather than gifted) he also should have special attention. In the above definition of a gifted student, the criterion is actual or potential superior achievement, not IQ; however, an individual IQ test such as the Stanford-Binet or the Wechsler is the most useful single test for predicting future high achievement.

In addition to the students whose achievements in subject-matter fields are superior, there are some who are excellent leaders. They also should be considered as potentially superior individuals who may make a significant contribution to society. The student leader's contributions as an adult may be as significant as those made by scientists, mathematicians, philologists, and engineers.

We in this country are lax in identifying and developing expressive abilities in such areas as music, art, dramatics, dance, most forms of speech, and creative writing. Our curriculum and teaching methods focus heavily upon the learning of what is already known in subject fields; too often they do not develop but discourage creative expression by students. The student who wants to question, to experiment, to create, is often frowned upon. Unless students are permitted to express themselves, we shall neither identify nor develop creative, expressive ability. Instead we will encourage conformity and greatly limit student inventiveness in the many areas where it is vitally needed.

ACTUAL AND POTENTIAL HIGH ACHIEVEMENT

Since standardized and teacher-made tests and informal evaluation procedures were discussed in Chapter 9, only the first two will be discussed briefly here. The major emphasis is on the observation procedures used by the teacher in identifying superior-achieving students.

Standardized and Teacher-Made Tests

As has been said, intelligence and achievement tests are the principal standardized measures of actual and potential performance in school subjects. When intelligence, achievement, and certain aptitude tests are administered systematically and the results recorded in a student's cumulative folder, a good percentage of the academically gifted students can be identified by examining these folders each year. For example, if a

school wants to identify the 5 to 25 percent of the students who show most promise of doing well in school, the cumulative records serve well as a rough screening procedure.

Cumulative records, however, are frequently incomplete because many students transfer from one school to another. Furthermore, a student's achievements from one grade level to the next are not static, but actually rise and fall; in addition, certain abilities emerge more definitely at various ages for different students. For all these reasons teacher-made tests, including sociometric tests, are needed to identify potential leaders, and informal aptitude tests in particular subject fields are needed to identify high achievers. Teacher-made tests show who the high performers are in a given group; they do not indicate how these particular students would compare with similar students of the same age in other schools or classes.

Observation Procedures

During junior and senior high school, most students develop new interests, intensify those already developed, become proficient in physical activities, greatly expand the use of their intellectual capacities, and become interested in a career. With these simultaneous occurrences, heretofore latent talents emerge. If these talents are to be identified the classroom teacher and the leader in cocurricular activities must know what to look for, want to look for it, and accept the idea that an *exceptionally talented student may at times outperform the teacher.*

Five of the more important characteristics of students with superior abilities are now discussed briefly. This list is not complete, but it may serve as a starting point, the teacher adding to it whenever *his* experience warrants.

High Intelligence. The student with high intelligence acquires new understandings easily and remembers them well without much formal drill. His vocabulary is large and often includes words with which *his* classmates are not familiar; he readily reads materials two or more grades above his present level. He reasons about problems, recognizes abstract relationships, and asks many questions. He is interested in many facets of a subject and brings to class related information from other subject fields. He is quickly bored with most drill-type assignments that may be appropriate for more average and slower-learning students, and he

gives trouble if not provided with challenging activities suited to his intelligence level and interests.

Unusual Creativity. The unusually creative student shows the characteristics already listed for students with high intelligence. In addition, he discovers many problems which go beyond the textbook, teacher, and classmates. He is not satisfied until a solution is found, and works persistently to secure detailed and comprehensive background information in the hope of finding a solution; in the process he may do whole-class assignments haphazardly or fail to complete them. He is flexible and open-minded, willing to try new things; he continually questions accepted facts, generalizations, methods of expression, and codes of conduct. He is particularly interested in reading about nonconformists.

Outstanding Leadership. The student leader is looked toward by the other students in the planning of projects, and is liked and respected by most of his classmates. He enters into group activities with enthusiasm and vigor, persists in his own efforts and encourages others in the group to complete a project or assignment. He is a leader outside the classroom as well, is able to sense what other people want, and is skillful in channeling diverse activities toward a common goal.

Superior Expressive Ability. The student with superior expressive ability in the visual arts often illustrates ideas and feelings by making informal drawings or using other media of expression. He is interested in the visual presentation of ideas and feelings. He shows originality in expressing himself in the visual arts and in verbally evaluating art objects; he is flexible in trying ideas but is also self-critical. His eye-hand coördination is superior in many activities, and he completes projects he has started.

The student with high ability in vocal or instrumental music resembles the one just described, except that music is his area of expression. He responds more rhythmically than most students and experiments with new melodies and techniques. He may sing better or learn to play one or more musical instruments without difficulty.

Great ability in dramatics is shown in superior use of the voice and gestures. A student thus endowed volunteers to play roles in many classroom and cocurricular activities, mimics other performers, including those on television, and expresses his emotions freely in both simulated and actual dramatic situations.
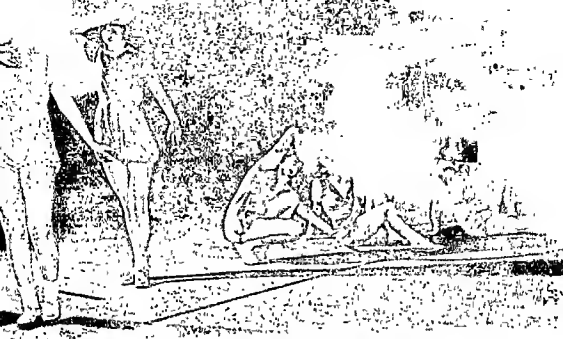
Fig. 13.2 The teacher's responsibility in identifying expressive abilities is especially important in areas such as these where no good tests are available. (Top, New York City Board of Education; lower, School District of Philadelphia, Pennsylvania.)
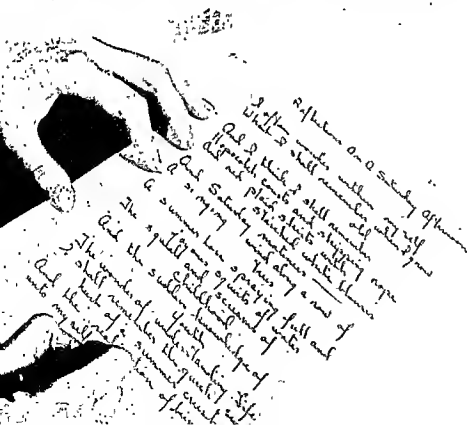
The physically expressive student is more energetic and has better control over fine- and large-muscle activity than most students. He enjoys physical activities and learns new motor skills quickly. He departs from traditional forms, is willing to practice strenuously for long periods to attain perfection. He may become frustrated if he has too many sedentary and verbal assignments (Fig. 13.2).

Verbal expressiveness in all forms of writing—description, poetry, short stories, biography, and the like—calls for all the characteristics of high intelligence. Though typically enjoying physical activities, the student with a gift for verbal expression prefers to spend more time in reading, going to the theater and watching good television performances, imagining and writing stories. He would rather develop his own topics and themes than do the assignments given the class. He volunteers to supply the verbalizations for study displays and cartoons, and to write for the school annual, and he persists until the task is completed.

Superiority in Single Fields. Especially in senior high school, there are students who, because their interests have somehow become specialized or because they lack a variety of abilities, are very superior in one field and average in most others. Such a student may show no creative ability outside that particular area. His IQ is usually at least 110 on an individual test and it may be considerably higher. The outstanding characteristic of talented students in such fields as mathematics, science, and foreign language is that they learn easily, are greatly interested, and pursue their work both in class and outside class.

It is imperative to remember that high abilities do not appear in students by chance. If a student in junior or senior high school manifests one or more abilities it is because he inherited superior capacities, opportunities were provided for the development of his abilities, and he had excellent guidance in his activities. This suggests the importance of identification from kindergarten throughout college.

SCHOOL-WIDE, CONTINUOUS IDENTIFICATION

Children with talent are most easily identified through a continuous program calling for annual appraisal of their present achievement, aptitudes, and interests. The best possible observation, interviewing, and testing are needed for this task. Further, opportunities must be provided for students to demonstrate their abilities. No program of regular class

and cocurricular activities which strongly emphasizes the acquisition and memorizing of facts, the acquisition and perfection of skills, the attitude that conformity is good and uniqueness is to be frowned on will enable the teacher to identify creative members of the student body. Furthermore, students with high IQ's and those with great abilities of expression will become encyclopedias and take pride therein, rather than identifying, attacking, and finding the new solutions to problems of individual and group life needed in our changing technological society.

It is impossible, at any one grade level, to identify all the talented individuals without error. No matter what criteria are used—IQ, achievement, leadership, expressiveness—as young people mature, there is some change in individual abilities. Thus, if those with IQ's of 120 and above were identified at the beginning of the seventh grade, many of them would fall below 120 by the senior year, and some whose IQ was below 120 in the seventh grade would have IQ's above 120 as seniors. Similarly with leadership and expressiveness, many who were average as seventh-graders would be in the most superior group in the senior year, whereas some who ranked as superior in the seventh grade would be average as seniors. Only if this identification is limited to the extremely small figure of 1 to 3 percent of the seventh-graders who are superior in many areas is it possible to identify those who will probably be superior in some area in the twelfth grade. But this does not identify the many less-talented students who might, with good instruction, become superior and render useful service to society in adulthood. From this it is obvious that yearly identification of all talented students should be made, rather than of only a few very superior students at the beginning of junior or senior high school.

In this connection, Lewis M. Terman, who in the early 1920's identified 1000 children with IQ's of 140 and higher and did follow-up studies of them into adulthood, wrote in 1954:

. . . Three judges, working independently, examined the records [to 1940] of the 730 men who were then 25 years old or older, and rated each on life success. The criterion of "success" was the extent to which a subject had made use of his superior intellectual ability, little weight being given to earned income. The 150 men rated highest for success [the A group] and the 150 rated lowest [the C group] were then compared on some 200 items of information obtained from childhood onward. How did the two groups differ? . . .

. . . The most spectacular differences between the two groups came from three sets of ratings, made in 1940, on a dozen personality traits. Each man rated himself on all the traits, was rated on them by his wife, and by a parent if a parent was still living. Although the three sets of ratings were made independently, they agreed unanimously on the four traits in which the A and C groups differed most widely. These were "persistence in the accomplishment of ends," "integration toward goals" as contrasted with "drifting," "self-confidence," and "freedom from inferiority feelings." [*]

The same study found that children whose IQ's were very high did not differ widely in achievement during the elementary-school years, but differed somewhat more in high school and still more in college; by about age 40 the differences were very pronounced, the higher achievers showing a greater degree of the four personality traits listed above.

HIGH MOTIVATION IS NEEDED

The gifted student has the same need for sensory gratification, social participation and approval, exploration, and achievement as do more average students, but his desire for exploration and for high achievement is more intense (Fig. 13.3). This desire can be stifled by prolonged misuse of motivational procedures, and by the need for social approval which may take precedence during adolescence. The student body, the school environment, and the broader community may accord more status and prestige to flashy but ephemeral entertainment such as athletics and quiz shows than to productive, consistent effort. Consequently, some students may not do as well as expected. In addition to the principles of motivation presented in Chapter 2, four procedures are worth special consideration in connection with gifted students.

1. The student will probably profit from an interview in which he is told about his potential talent. For example, it is possible that a very able student in art, music, or science may be completely unaware of his consistently superior achievement. Knowledge of this may encourage him to develop this ability more fully, especially if his teacher or someone else can relate it to his choice of a career. The ability of high-school students to appraise themselves reliably is often overestimated. Some college students who rank among the highest achievers in the undergraduate program are unaware that they would probably be successful

[*] Lewis M. Terman, "The Discovery and Encouragement of Exceptional Talent," *The American Psychologist*, June, 1954, pp. 228–230.
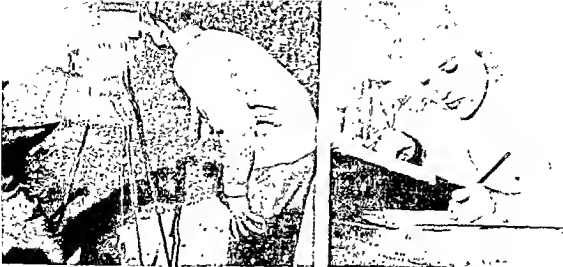
Fig. 133. The need to explore and to achieve well through consistent effort are major motives on which to capitalize. (Left, St Louis, Missouri, Public Schools; right, Madison, Wisconsin, Public Schools.)

in graduate work. In other words, they need help in appraising their present achievements in relation to specific programs in the future.

2. The parents of a gifted student may profit from being informed of his superior performance and consequently may give him encouragement and help not otherwise available. In some cases, however, education is not regarded highly by parents. If parents of a gifted child know his potentialities and also the career possibilities related thereto, they may exert a very powerful influence on his attitudes toward school.

3. Keeping the community informed of the practical value of school work may raise its expectation of topnotch performance by students. Parents attending athletic contests expect each athlete to do his best; and they usually get just what they expect. If somehow the community could make known its expectation of maximum performance in all areas of work, students would probably meet these expectations.

4. High achievement and consistent effort in all areas of school work need rewarding. There is probably no superior athlete in high school who fails to receive enthusiastic approval during the game and later in the paper for an outstanding performance; and the athlete who does reasonably well academically has many college scholarship offers. Although athletic prowess may be greatly overrewarded at present, it is possible that if the superior performers in all areas of school work received rewards and individual attention, there would be little difficulty in get-

ting potentially high achievers to work consistently and with enthusiasm. As many scholarships should probably be available for superior performers in such areas as home economics, business education, science, social studies, and music, as there are for athletes. Furthermore, the whole student body must be led *to approve superior performance* in any school area as much as they do in athletics.

Some procedures that will surely dull the gifted student's zest for learning and consistent effort are the following: Giving him the same assignments that all the other students in class have; giving him extra assignments of the type he has done before; having him do chores for the teacher when he finishes an assignment quickly (checking themes for misspelling, scoring objective tests, checking science workbooks, operating the mimeograph, keeping class records, answering the telephone, checking the roll); being given too much work by each of five different teachers, thus causing him to dislike school because he cannot succeed.

Motivating the gifted student is not difficult when the students and the community value hard work and consistent effort. But when the general attitude among students is "getting by with as little work as possible" and when the parents do not have high expectations of their children or uphold education, this problem of motivation is often the most difficult one the teacher faces.

John W. French investigated, for the Natural Science Foundation, level of ability as motivation for attending college in 3197 boys and 3432 girls, of whom the top 30 percent were students of high ability, the middle 30 percent of average ability, and the lowest 40 percent of low ability. According to this report:

. . . Sheer level of ability, a good predictor of whether a student will plan to go to college, is an even better predictor of whether he will actually go. As

	Boys' Ability High Middle Low			Girls' Ability High Middle Low		
Per cent planning to go	68	43	28	58	36	25
Per cent of those planning who actually went	79	65	45	76	60	42
Per cent not planning to go	32	57	72	42	64	75
Per cent of those not planning who went	19	13	5	9	7	4

may be seen from the figures given [above], the higher the ability level, the larger the per cent of students planning to go to college, and of those planning to go, the larger the per cent who actually do go. Moreover, the higher the ability level, the larger the per cent of those not originally planning to go who nevertheless do go. It is interesting to note that at all levels of ability, the per cent of girls who plan to go to college, and who carry out these plans, is lower than the comparable figure for boys.

A number of other factors were also found to be as closely related to actual attendance as to college plans, or even more closely related. Among these were: number of friends going to college, class standing, amount of discussion about college with teachers and counselors, amount of science and mathematics taken in high school, number of siblings (negatively related), father's occupation, father's education, proportion of college expenses which family is able to pay.

The background and situational factors appear to operate in about the same way for all three ability groups, although of course the basic percentages differ. *For example, at each ability level students who have had at least some discussion about college with teachers or counselors are more likely to have college plans, and to carry out these plans, than are students who have had no discussion about the subject with the school faculty.* Figures for boys are given below:

	Amount of Discussion					
	High		Middle		Low	
	Some	None	Some	None	Some	None
Per cent planning to go	75	37	54	17	48	9
Per cent of those planning who actually went	79	73	68	48	49	36
Per cent not planning to go	25	63	46	83	52	91
Per cent of those not planning who went	24	11	18	8	7	3

Even in the case of students who were not at first planning to go, the effects of counseling in changing these plans can be seen in the last row of the table above.[7]

ADMINISTRATIVE AND OVERALL CURRICULUM PROCEDURES ARE VARIED

There are many ways, not just one, of providing for the needs of gifted students. The appropriate one varies with such factors as the size and location of the school, the proportion of gifted children in the student

[7] *Developments*, Princeton, N. J.: Educational Testing Service, March, 1957, p. 1.

body, the overall curriculum plan, the adequacy of instructional materials and equipment, the competence of the teachers, and the desires of the parents. In the final analysis, every good program for a gifted child is based upon understanding a particular child, his home, and his school. Thus, it is entirely possible that one school will have many procedures, rather than a uniform one, for educating gifted children. The following discussion deals with some widely used procedures, all of which have been reported as being good in one or more schools. Since what is done in the elementary grades and in college affects the junior and senior high school, this is also mentioned briefly.

ACCELERATION BY DOUBLE PROMOTION

Double promotion, that is, skipping a grade, seems reasonable in the elementary and junior high school only if the school cannot provide good instruction without it. Too many gaps in basic skills are often left because of skipping. In schools in strictly residential localities, if all whose achievements in arithmetic, reading, and language were two or more grades above national norms skipped a grade, as many as half of the student body would be promoted in this way. And many would skip two grades before entering senior high school. Only in schools with a small percentage of gifted students does double promotion appear to offer any value.

CONCENTRATING INSTRUCTION IN SHORTER PERIODS

Concentrating instruction into a shorter time is a more reasonable method of acceleration than double promotion. An ungraded primary school that operates on a semester plan accelerates some rapid learners by one or two semesters without any skipping. Students in many four-year high schools can earn sufficient credits for graduation in three years. Junior high schools similarly enable completion of the program in two and one-half or two years instead of three. Some colleges give credit for certain high-school work which enables the student to secure a college degree in less than four years.

One factor in acceleration is the month in which a child is born. For example, one child whose birthday comes early in the year will enter

Grade 1 a year sooner than the child whose birthday comes late in the year and who therefore has not reached the required age when the school year opens. Brighter students who for this reason are delayed in entering school should be accelerated so that they will complete high school at least as young as average and low-ability children who happened to be born during a month which permitted earlier starting in the first grade.

When should acceleration take place? Except for overage bright children, it is generally better for it to occur later in the student's school career, when he himself assumes more self-direction. Thus, if the gifted are to earn the baccalaureate degree at age 19, this can readily be accomplished by condensing the four years of high school and the four years of college into three years each.

How fast should acceleration be? Again, this depends on many factors. Those responsible for an adolescent's finishing high school by age 16 should be ready to assume reasonable responsibility for assuring that this student will have as much opportunity to develop his talents after he graduates as if he had remained in high school until age 18. Our economy does not yet guarantee a college education or a productive job to all high-school students who graduate at age 16. The number of good jobs open to such young people is very limited, whereas there is great possibility for a student to spend another two years productively in a good high school. Just as those who advocate acceleration in high school and college must assume some responsibility for the students affected, so also those who do not advocate acceleration must assume responsibility for making the twelve years leading to high-school graduation productive and worth while.

SPECIAL CLASSES AND SCHOOLS FOR THE GIFTED

Special classes in which gifted children receive all their instruction apparently are best in large metropolitan areas and in large school districts with only a few high achievers among the students. In small communities with a large percentage of high achievers and where parents are vitally concerned with education, such classes present so many problems that other procedures are more desirable.

Special classes for part of the weekly instructional program are essential in many cases. For example, elementary-school children with talent

in an academic area, or art, or music, or dramatics may receive instruction for one or more periods per week in a special class. This may also be done at the high-school level. In addition, the high school may offer advanced seminars in a variety of subject-matter areas, or the seminar may cross subject lines. The seminar plan merits experimentation in smaller and medium-sized high schools.

Only in larger metropolitan areas like Cleveland and New York, where people are neighbors by residence and not by association and where transportation is not a problem do separate high schools for the gifted seem practicable. Special high schools for the gifted in small cities and more sparsely populated rural areas would take the form of a few district high schools, with the students living away from home.

SECTIONING STUDENTS WITHIN THE GRADE OR SUBJECT AREA

Any school that has enough students for two classes within a grade can use sectioning. Although sectioning is easy on the basis of one IQ test, better results will be obtained if it is based on achievement level io various areas such as mathematics, English, and science. It is unwise, however, to section students for all their work. For part of each day during their entire school career, the gifted should be taught with children of varying abilities and interests.

Many problems are encountered in sectioning, and the results may be at one extreme or the other. If sectioning is to have good results, children, parents, teachers, and school administrators must coöperate fully. When children resent sectioning, or parents oppose it, or teachers of lower-achieving sections have lower status than the teachers of the higher-achieving, it is doubtful whether the possible higher achievement is worth the disadvantages which sectioning may involve.

GROUPING BASED ON CAREER PLANS

The high school with a variety of tracks or curricula and a good core of common learnings can make good provision for a variety of talents. During the junior and senior year it can offer the gifted many opportunities in all areas—English, social studies, science, music, mathematics, agriculture, home economics, business education, among others. The core of common learnings prepares for college entrance and at the same time

enables those who do not intend to go to college to be ready for employment upon graduation. If in addition the gifted student is encouraged to work for additional credits, he can become either highly specialized in one area such as science or have knowledge of a number of areas. There are arguments for and against heavy specialization just as there are for the widespread use of electives.

Inasmuch as many students in the ninth and tenth grades obviously cannot decide on a career and since it is impossible reliably to differentiate those who may become high achievers as adults, no student should be deprived of taking specialized courses in Grades 11 or 12 because he did not take a particular subject in Grades 9 or 10. Specifically, if a student has taken neither algebra nor geometry as a freshman or sophomore, but decides to take one or both in Grades 11 or 12, he should be permitted to do so. This holds true in all other subject areas.

COCURRICULAR ACTIVITIES

Besides the various procedures for providing for gifted students already discussed, cocurricular activities of many types offer these students a chance to explore, experiment, and develop their talents. Because cocurricular activities are treated more fully in Chapter 16, we shall here mention only that student government, school assemblies, and various social activities provide excellent opportunities for students to acquire and develop leadership skills. The many subject-affiliated, service, and hobby clubs allow students with unusual ability in a particular area to advance. Cocurricular groups can also be formed on the basis of the career students will enter after graduation. Dramatic, athletic, music, art, and creative writing clubs provide for development of creative expression in these various areas.

As will be pointed out in Chapter 16, care is necessary in encouraging and controlling participation in cocurricular activities. In relation to gifted students, this means that the shy or research-minded student is often encouraged to ally himself with a small group and learn how to communicate with other students of varying interests. It means also that the bright, sociable, physically superior gifted student is prevented from dissipating his energies in so many cocurricular activities that his studies suffer.

Fig. 13.4. Enrichment is vital in any program for gifted students. (Top, School District of Philadelphia, Pennsylvania; lower, Wilmington, Delaware, Public Schools.)

ENRICHMENT OF LEARNING ACTIVITIES IS ESSENTIAL

Regardless of the school's administrative or curriculum provisions, the eventual success of any program for gifted students rests upon the teachers' identification of these students and the enrichment of their learning activities (Fig. 13.4). The characteristics of these students outlined in the section on identification suggest the nature of good teaching procedures for them. Creative and expressive abilities are encouraged; research-type skills are emphasized; high standards of work are maintained; problem-solving techniques are taught at a level appropriate for the gifted; goals are set coöperatively by student and teacher; individual and group work is properly balanced; an adequate supply of instructional materials is available in the classroom and library; laboratory-type activities are organized in many subject fields; and student self-evaluation of progress and performance is encouraged.

Although gifted students were mentioned briefly in earlier chapters in connection with whole-class, small-group, and individualized activities, the following sections on grouping within the class and individualizing instruction are focused on the gifted student, particularly in classes having a wide range of abilities and interests.

GROUPING WITHIN THE CLASS

Achievement-level grouping is useful in a class in which the range of student abilities is wide but in which there are three or four gifted students. This type of grouping can be used to provide appropriate reading and other instructional materials and assignments for this small group.

Friendship grouping is valuable primarily to get one or two of the more able students to coöperate with the less able on various projects and assignments. While helping the less able, the more gifted should learn the subject matter more thoroughly and also associate pleasantly with classmates who have different abilities.

Interest grouping, which is based on similarity of interest, can result in students with similar abilities and interests working together on appropriate topics and projects; such groups may include the gifted. However, unless the goals set by the teacher are accepted by the students as meeting their achievement levels, the members of interest groups will

not be at the same achievement level. Nevertheless, this form of grouping is good for motivation; it may result in high achievers' developing desirable attitudes toward students with varying levels of achievement, and in superior achievers' helping the less able.

Differential-ability grouping is particularly useful with gifted students. For example, if a teacher wants the three or four gifted students in his class to get practice in leadership, he assigns one to act as chairman of each of three or four smaller groups. Similarly, when a proficient reader or researcher is desired in a group, one of the gifted is assigned to it.

Some teachers pair a gifted student and a slower learner, the remainder of the class working individually during supervised study. This can lead to a better understanding between the two in such activities as mathematics, science experiments, home economics, foreign-language conversation, spelling, and the like. As a rule, the gifted student should not be held to the pace set by the rest of the class, nor should he work with a slower learner for more than part of a period each week unless he himself derives benefit.

In unit teaching, these methods of grouping are typically used at various times in the unit or semester. Besides enabling desirable learning of subject matter, discussion of the purposes and values of these methods of grouping provides a good learning experience for the gifted student.

INDIVIDUALIZED INSTRUCTION

The variety of projects and assignments which can provide efficient learning for gifted students is so great that only a few can be listed here. These include writing on such subjects as persons, events, and ideas; conducting demonstrations and experiments; illustrating mathematical, historical, and scientific events and ideas by means of cartoons, color, or other media; engaging in research and reporting orally on significant people, occurrences, and developments; preparing and presenting individual dramatizations or musical performances; and creating instructional materials for the classroom or community. The many teachers who have assumed responsibility for aiding gifted students in their classes usually have no difficulty in finding projects in the literature. Their primary problem is planning with such a student what to do and how to go about it, and then following through. Generally, this problem can be solved by

meeting gifted students during the supervised study period to plan, guide, and evaluate, and also by arranging individual conferences outside regular class hours.

High-school courses in home economics, agriculture, art, instrumental music, and athletics provide excellent projects for individualized and small-group instruction. The superior student in home economics, for example, may show a high level of skill and creativeness in making their entire wardrobe, including formals.

High-school teachers, each with a teaching load of 150 students, of whom 5 to 30 percent may be high achievers as adults, have problems in identifying and providing for gifted students. The complexity of the task, however, should not be permitted to result in mediocrity and boredom for these students.

Many elementary schools have shown clearly that the gifted can be well provided for in language arts, social studies, and arithmetic without special classes or schools or sectioning within grades. Junior high schools are getting good results with core classes which decrease the number of students per teacher, thus enabling the teacher to know each student and his needs. The senior high school, which has the best opportunity to provide well for the gifted through its various elective courses and tracks, should examine carefully the subjects required for graduation, for it is here that instruction is usually of least benefit to the gifted. There seems to be no reasonable explanation for this other than the large number of students per teacher, too short instructional periods to permit individual and small-group planning, and common standards and identical assignments for all students—too easy for the gifted and too difficult for the low achievers. If high-school funds are not sufficient to provide as well as possible for the gifted, further utilization of community resources becomes especially urgent.

COMMUNITY RESOURCES ARE USED

Many schools and classrooms are more crowded today than they were five years ago, and there are not nearly enough talented and gifted persons who are pursuing teaching as a career. The nonathletes in high school often get their physical exercise (it really cannot be called physical education) in groups as large as 100. Parents are still expected to pay for
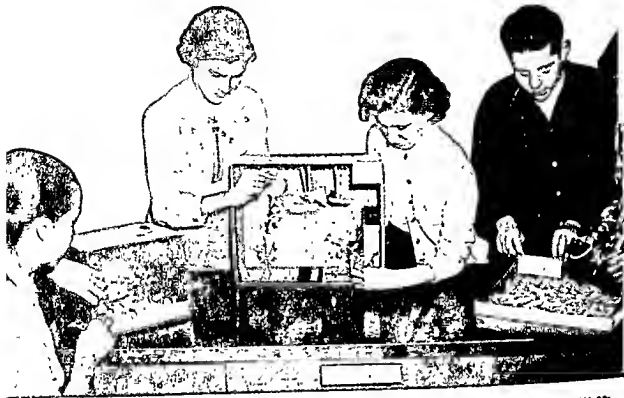
Fig. 13.5. Not only in a science activity like this but in all fields of study, community resources enrich learning opportunities. (Dallas, Texas, Independent School District.)

the music, art, and dance lessons a student needs to develop his talents—necessarily private because the school lacks space, time, and teachers. Many persons are trying to teach adolescents mathematics and science who themselves have poor backgrounds in these areas. Foreign languages are often taught by individuals who cannot speak the language well.

The principal cause of this neglect of talented and gifted children is to be found in our society, which persistently refuses to provide adequate support for education at all levels, from kindergarten through higher education. Since this state of affairs has existed for many years and probably will continue, parents and school people should scrutinize every community resource as a possible help in educating gifted and talented students. Community recreation programs which include crafts; YMCA and YWCA programs in art, science, and physical education, in which talent may be developed; the museum, art gallery, concert hall, and science exhibit which may spark a dormant interest; certain commercial and educational television programs; the retired professional or businessman

who combines an interest in his field with a liking for young people; the various special-interest groups in school that carry on out-of-school activities; the college or university programs for young people in the fine arts, foreign languages, and the like—any of these are useful in the identification and development of talent in the community. Everyone should know about them and utilize them (Fig. 13.5). Efficient use of community resources for the development of gifted children means hours of extra work for a teacher, counselor, or principal; the rewards—intellectual, moral, and social—are well worth this effort.

SUMMARY

The demand for gifted individuals is very high and will probably remain so, though the number of young persons between the ages of 20 and 30 will increase sharply above the present very low level. With this keen competition for well-educated, talented young men and women, the pressures exerted on the high schools by various groups are intense and often contradictory. It is important that educators and parents decide what kinds of persons they wish high-school graduates to become as the result of their education. How this question is answered will in part determine who is identified as a gifted student and the educational provisions made for him.

Continuous, systematic identification throughout Grades 1–12 is needed. Accepting the idea that a gifted student is one whose actual or potential achievements in any useful area of endeavor are consistently superior, the teacher will continuously attempt to identify the students with a high achievement level in any school subject, those with high IQ's, those showing definite leadership abilities, and those superior in expressing themselves in art, music, dramatics, writing, or the dance. Some students will be superior in most of these fields, others in only one or two. The tendency in the past has been to apply the term gifted to the *generally superior* student with a high IQ, the student who is superior in a single area such as music being known as talented. At present junior and senior high schools would do well to identify and develop any talent any student may have; they cannot afford to neglect the highly gifted. Standardized and teacher-made tests, interviews, and teacher observations and evaluations are needed for this identification.

Motives of gifted students are similar to those of students with average abilities, but are more intense in the areas of exploration and achievement. Planning and counseling with the gifted student and his parents are useful in aiding him set goals. A variety of administrative and curriculum procedures are needed. No one plan works well with all students, in all schools, in all communities. In the last analysis, every good program for a gifted student is based on understanding the particular student, his home and his school. Acceleration, special classes, special schools, sectioning within grades, cocurricular activities, and the comprehensive high-school curriculum with common learnings and a variety of tracks and electives are all used in various school systems throughout the United States. Regardless of the plan, it is up to the classroom teacher to make any plan valuable to the gifted student. Grouping and individualized instruction are required, especially in classes whose students show a wide range in interests and achievement levels.

Questions and Activities

1. List and discuss briefly the main factors contributing to the present shortage of gifted adults.
2. On the basis of your own experience, describe some of the factors which are responsible for superior achievers who graduate from high school not going to college. For superior achievers as freshmen in college not continuing to graduation.
3. Evaluate the discussion of the kind of gifted persons wanted as high-school graduates.
4. A gifted student is defined as one whose actual or potential achievement in any useful line of human endeavor is consistently superior. To what extent is this definition more inclusive than one based on a high IQ?
5. Discuss the use of standardized intelligence, achievement, and special aptitude tests in identifying gifted students, as defined in the preceding question.
6. How can a classroom teacher identify gifted students in the absence of all standardized tests? What may be used to supplement test results?
7. Why should identification procedures be used throughout Grades 1–12?
8. What are the main problems connected with the motivation of gifted students?

9. State the possible values and limitations of each of the following in providing for the gifted: (a) *accelerating by double promotion;* (b) *accelerating by condensing learnings;* (c) *providing special classes in which the gifted receive all instruction;* (d) *providing special schools in which the gifted receive all instruction;* (e) *having certain classes within the total instructional program in which the gifted receive part of their instruction daily or weekly;* (f) *sectioning students within the grade and subject area, which brings the highest achievers together in each grade and subject area;* (g) *providing a variety of curricula and tracks, such as general, college preparatory, and vocational, along with a common core of courses, electives, and cocurricular activities;* (h) *conducting honors classes, seminars, and other advanced classes in the junior and senior year of high school.*

10. In a school, ninth-grade students are tentatively considered gifted if they meet one or more of the following criteria: (a) individual IQ score of 120, (b) arithmetic and reading achievement test scores equivalent to the 75th percentile on national norms, (c) teacher's characterization as a superior student. In terms of your subject-matter interest, describe how you would provide instruction in one of your ninth-grade classes if it included three or four students such as the above. If your class were entirely composed of such students, how would you plan instruction?

11. Outline possible procedures for providing for a gifted high-school student who, because of fixed age requirements for starting Grade 1, is now older than most of his classmates.

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14.

Promoting
Mental
Health
and
Self-Discipline

How Robert Merriman, now a junior-high-school principal, promoted mental health and encouraged self-discipline as an experienced teacher is reported as follows:

My teaching responsibilities are three freshman classes of General Science, two classes of Senior Forum, and one General Review class for seniors who have had academic difficulties. The total number of students per week is about one hundred and eighty. We have an hour-and-four-minute class period, five periods a day, and all students take five subjects per day with no free periods.

Let us first consider the freshman General Science group. This group consists of about eighty per cent rural students and students coming from parochial schools. The class is required for these students and is elective for those who have come up through our city school system. Obviously, there is a wide variety of abilities, characteristics, interests, and backgrounds represented in this group. . . .

The first day in class I distribute books, make assignments, and spend about fifteen minutes explaining what I expect so far as class procedure is concerned. The main discussion is about mutual respect, one student for another and my respect for each of them. This acts only as an introduction to the subject but I stress this phase each day as we continue through the year. Only a short time passes before the student realizes the idea of respect and responsibility, and "discipline problems" do not exist.

Though we teach a basic background of subject matter, my primary job is to know each student as well as possible as soon as possible. I check cumulative records and make whatever notations I feel important in my class book. Then I spend several weeks trying to learn the characteristics of each student. Usually by the end of the first four weeks I know the special interests of each student. I know how he will respond in class and the type of question he can handle best. I become familiar with the student's home environment and learn who his friends are. By this time I have had an opportunity to meet most of my students informally and have had a chance to talk farming with an interested farm youngster, hunting and trapping with another, shows with some, or sewing, or any of a number of different activities in which they are interested. I want to be interested in their activities and want them to know I am because soon I share their interest and confidence. The net result: the class is not a formal "sweat session" but is rather informal and becomes fun.

After becoming acquainted more or less personally with each student it is an easy matter to "bend" subject matter toward the interest and ability of the student, and the student responds confidently because he feels that this information applies to him. Soon the "slow" student feels success and achievement

and he is willing to go ahead and try the next assignment. The "fast" student likewise feels he can master the current subject and there are individual projects and assignments for him in addition.

Assignments are made in a block form covering a total unit of work. I also propose dates for completion but include with this schedule the statement that these are only probable dates, that discussions, slides, or the students' projects may delay this schedule. My main emphasis is that I do not care how fast we go but I do care how well they do and I want to include all the phases of the subject in which they are interested. So far this approach has worked very well. One of the contributing factors lies in our schedule. During the hour-and-four-minute period there is ample time for study and discussion, demonstration, or activity. Quite often the first part of the hour, about thirty minutes, is used for study and the last part for activities, demonstrations, etc. My thought here is that each student has had a chance to stretch between classes and it is easier to study this first part of the hour. As soon as interest lags, students become uneasy, or tired of reading and individual study, I get them into discussions, moving around in lab work, etc. This program in class is not "iron-clad" but is changed in accordance with the day. Some days the group is uneasy and not inclined to study. When I sense this I move them into some active participation. Other days it seems they want to continue studying throughout the period so we do just that. With the students in class for study instead of in study hall, the individual help theory becomes practice.

Differences in abilities and interests are provided for in several ways. Probably the most important adjustment to ability and interest is to avoid a set scale of accomplishment that all students must attain. For some students a grade of 75 would be a high mark and their test scores would average about 65 per cent. But the final grade would probably be a C or even higher. If someone wanted to know how a student with an average of 65 got a "C" I would show him that class participation, interest, effort, extra credit activities, along with tests and daily work, are all incorporated in the final mark.

My "discipline" is handled on a mutual respect basis. I have yet to "bawl out" a student in class, nor do I send him to the office as I feel he has not violated anything in the office. Instead when he leaves class I ask if he would please stop in after school as I feel we had better arrive at an understanding before both of us get into trouble with each other. In eight years of experience no one has failed to appear for that after-school meeting, and no one has left without a satisfactory explanation and readjustment for both of us so that we can each do a better job. I try to make my "discipline" a matter of mutual agreement instead of my telling the student what I think of him and letting it go at that.

Seating arrangements in all classes are primarily determined by the students. There are two exceptions. First, if the student has a physical defect, I try to seat him where it will suit him best. The other exception occurs only if the

student feels he is headed for trouble if he continues to sit where he is and requests to have his seat changed. In this instance someone else has to be moved as we have no spare seats.

Generally speaking, an individual or a group of individuals lives up to a reputation that they feel they have or that others have for them. By instilling in the student or the group a feeling of security, mutual respect, and a display of compatibility, I soon have a sound, harmonious learning situation. By earning respect instead of demanding respect and by steering the students instead of commanding them, a good learning situation is readily achieved.

In spite of a heavy teaching load, Mr. Merriman was able to adhere to the following principles:

1. Students are understood as individuals.

2. An orderly work situation is maintained.

3. The classroom climate focuses on self-discipline and group control.

4. Correction and sometimes punishment are necessary.

5. Some students and classes require special treatment.

Fig. 14.1. A good learning situation promotes mental health and self-discipline. (Top, Madison, Wisconsin, Public Schools; lower, School District of the City of Berkley, Michigan.)

Mr. Merriman taught in a moderate-sized community where education is generally valued highly, the curriculum is flexible enough to meet the needs of all the students well, and the number of antisocial groups and maladjusted students is relatively small. In communities where these conditions do not prevail, some of the principles he followed might need to be modified. But everyone, regardless of where he teaches, must recognize that discipline is closely related to the overall learning situation. No teacher can have a poor learning situation and at the same time maintain good discipline and promote the mental health of the students (Fig. 14.1).

The above implies that the goals of classroom discipline are twofold: to help each student grow out of dependence on adults for direction and control to self-direction and self-discipline, and to set up an orderly work situation so that learning will proceed smoothly for all students. Promoting mental health requires that these two goals be achieved, and the other principles stated above are also conducive to mental health, as will be shown in the subsequent discussion.

STUDENTS ARE UNDERSTOOD AS INDIVIDUALS

Knowing a student as an individual involves, among other things, becoming acquainted with him and identifying his interests, aptitudes, and achievements. There are many ways in which a teacher may become acquainted with a student—visiting his home, making a seating chart the first day of school so he can associate names with faces, and allowing each student to talk about his interests soon after the school term starts. Also useful are the cumulative record, tests, and informal evaluation procedures described in Chapters 7 and 9. It is especially important to discover how to meet the developmental needs of adolescents if the teacher wants to promote mental health and to minimize disruptive conduct and shy, withdrawing behavior.

Fig. 14.2. How should the need for approval from agemates be handled if a good working situation is to be provided? (Chicago, Illinois, Public Schools.)

Classroom disturbances are often related to the adolescent's need to control his emotional expression, to make satisfactory adjustments to his agemates, and to establish new and satisfying relationships with adults.

Disciplinary procedures designed to help students make good adjustments to their agemates utilize the need for attention and approval. Opportunity is provided for students to discuss problems and lessons with one another, to work together and to make rules of conduct for working together, and to evaluate progress in living up to individual and group standards (Fig. 14.2). In this classroom situation the teacher serves as the

Fig. 14.3. When do students need their teacher's approval? When should it be withheld? (School District of Philadelphia, Pennsylvania.)

leader to insure that the need for attention and approval is satisfied in socially approved ways; thus this need becomes a positive motive for providing a better learning situation. The teacher who helps adolescents gain attention and approval by doing their work well is capitalizing on this need. Not to permit the adolescent to satisfy this need while directing his activities toward useful ends is to invite a variety of behaviors not conducive to a good learning situation. The antisocial behavior manifest in an extreme form in gangs of delinquents may have originated in the classroom. These gangs enable adolescents to satisfy their need for the attention and approval of their agemates; the means of doing so are destructive rather than constructive, and hence are injurious to society and the adolescents.

Young people's need for attention and approval from their teacher is perhaps not so strong as it is from their agemates; however, many show this need (Fig. 14.3). The adolescent's feelings toward adults are often ambivalent; that is, he wants to be completely independent of adult control but at the same time he feels very insecure unless he knows that his parent or teacher approves of him. High-school students are in various stages as far as this need is concerned; some need a great deal of approval from their teacher, whereas others are relatively mature. Constructive disciplinary procedures take into account the differences in development, give the students increasing freedom of decision when they are ready for it, and use their need for adult approval to help them in making choices. The teacher who makes all the rules and strives for uniform obedience is not helping his students increase their self-control.

Controlling emotional expression often presents problems for students. Adolescents frequently find themselves in situations in which dis-

ruptive emotions are involved. As preventive measures, teachers need to be familiar with the kind of situations which arouse such emotions, to recognize symptoms of emotional stress, and to avoid crises in their classrooms. The teacher who would help young people mature emotionally organizes constructive activities in which they learn about emotions, learn how to analyze situations objectively, recognize socially approved methods for relieving emotional tensions, develop skill in meeting problem situations, and learn how to discard immature patterns of emotional response. In many classrooms these kinds of learnings are largely incidental. Nevertheless, every teacher may well give attention to the student who is highly immature or infantile emotionally because he will be a constant source of irritation for the group until he becomes more mature.

AN ORDERLY WORK SITUATION IS MAINTAINED

All human beings try to find meaning in their activities. An individual does this as he can perceive order in an assignment, in work, in his relationships with others. Disorderly, meaningless situations are not conducive to mental health. Disrespect for constituted authority and the resulting disorder are not good for the adolescent, for the teacher, or for society. Therefore, the teacher should manifest enthusiastic, confident leadership. This and some of the other characteristics of an orderly work situation are considered in this section.

MANIFEST CONFIDENT LEADERSHIP

In his first meeting with a class, the teacher has the responsibility of establishing his position as the figure of authority in the classroom. Everyone—parents, students, and those who hire him—expect him to maintain order, using means appropriate to the age and characteristics of the students and the size of the class (Fig. 14.4). The means of securing order vary widely. The means used by the woman teacher with a soft voice differ from those used by a large man with a commanding voice. Moreover, the same teacher may vary the methods used from class to class. The following account by an experienced teacher describes one of the many ways to establish student respect for the teacher as the leader.

It is the first meeting with a tenth-grade woodwork class, which is elective and has 24 students. So that everyone has a definite understanding of what is expected of each student and each student has a good idea of what to expect

Fig. 14.4. Confident leadership, as demonstrated in this class in Spanish, is expected of the teacher. (Pinellas County, Florida, Schools.)

of me, I discuss the general procedures to be followed by the class. These include definite things to do at the beginning of the period, at the end of the period, and during emergencies.

In the first part of the period, I list the special materials needed and discuss the care of equipment in the shop. During the last part of the period, I discuss briefly the objectives of the course and the outcomes expected, with the students raising questions at any point in the discussion.

I find that the large majority of the students are interested in doing what is expected of them when they know what to do. The very small minority that does not want to conform usually follows instructions in order to get the approval of the large majority. Also, if a student violates safety rules or disobeys instructions, he is not allowed to continue on a project or use a machine until he and I have had opportunity for a conference.

In this teacher's classes, the work situation is good from the start; and when the students are ready to accept responsibility, it is given to them.

It is wise to be firm in early meetings with students rather than easy-going. The degree of firmness needed varies widely with the situation, as the following reports from experienced teachers suggest.

My first teaching experience, years ago, was in a Vermont high school. I started confidently, full of hope and enthusiasm. I was going to be the kind of teacher I always liked as a student—a teacher who was kind, courteous, and humorous. In this school, corporal punishment was widely practiced. Pupils were hit by teachers over the knuckles or finger tips with a ruler. Some were sent to the principal for paddlings. I had contempt for all of this.

I started with kind, humorous treatment of the students. Early in the school term, before I got far with the humorous part, I found myself in front of an auditorium study hall, with a ninth-grade boy on the floor and my foot on his chest, listening to the boy's protestations of what his father and big brother were going to do to me. Youngsters like this mistook kindness and humor for weakness but they regarded firm severity as an indication of strength. They came to school because state law compelled them to. Fortunately, this latter group was in the minority.

We shall not debate the wisdom of this teacher's means of establishing his role as the authority. There is a tendency in some schools, however, for students to see how far they can go with a new teacher. Generally, firmness during the first contacts does not frustrate the students who come to school to learn, and it pays with those who are testing the teacher. But students in many schools accept the teacher as authority without question, as shown in the following:

My classes are in United States History, eleventh-grade, with classes of thirty to thirty-six students. The majority of these students assume much responsibility for mature conduct. The problem of discipline, with very few exceptions, does not occur. The students and I have a feeling of mutual acceptance; courteous behavior is neither difficult to develop nor hard to maintain.

These students, as individuals, have every right to expect and receive treatment that I also desire to have afforded to me. When they come to me with reasons for failure to finish an assignment on time, I accept their reasons without questioning. Few take advantage of this, and instances are far between when students fail to have assignments in on time. In cases of disputed questions or wording in tests, I listen to their criticisms, and many times find it highly valuable and constructive. I believe that this acceptance of their ideas and views lends stature to the class and encourages growth in self-discipline.

This teacher, who is in a large senior high school, not only displays a desirable attitude toward his students but has established a school-wide reputation among the students as a good teacher. His students like his classes, do well in them, and learn self-discipline and control.

ESTABLISH ZEST FOR LEARNING

Everyone who has observed small children closely marvels at their exploratory behavior. Preschool children ask questions concerning all phases of their environment: What is the moon? What makes lightning? Where do babies come from? Where is the airplane going? Why does the baby cry? Most mothers spend a considerable amount of time trying to discover where curiosity has led young children in their outdoor play. The nursery school and kindergarten build fences around playgrounds to keep this curiosity within supervisory limits. With few exceptions, young children are curious, exploratory, and eager to learn.

For many children, this zest is blunted during elementary and secondary school by restrictions imposed in the home, the neighborhood, and the school. In the first grade the urge for activity that leads to new discovery is thwarted by the need to conform to a confining situation—the classroom. Answers the child wants now to solve an important problem are deferred because a problem an adult wants solved takes precedence. Subjects in the high school are frequently taught as if every student needed the same dosage of an identical presciption. Eventually, the student no longer finds a challenge in the classroom learning situation; his previous eager search for solutions becomes passive tolerance or even open resistance.

The need for relating classroom experiences to out-of-school life and for helping the student see practical applications has been mentioned earlier several times. However, this need in no way denies that students

Fig. 14.5. Zest for learning promotes good morale and mental health. (Top, Toledo, Ohio, Public Schools; lower, Standard School Broadcasts.)

should be helped to feel the thrill of discovery for its own sake (Fig. 14.5). Typing for five minutes without error, playing something on the piano for the first time, giving a five-minute talk to one's classmates, building a desk, discovering how to solve a problem using a letter for an unknown quantity—all of these may be thrilling explorations. To what extent secondary-school classrooms may be workshops in which students may feel the thrill of making important discoveries is not known. In some classes this situation does prevail.

In classrooms where students are frustrated by having identical assignments, conforming to overly restrictive rules of conduct, or having to use monotonous work methods, many discipline problems arise. A teaching method that encourages passivity tends to destroy the zest for learning. Adapting learning experiences to student needs, using a variety of instructional materials, and encouraging students to find new solutions give zest to learning, promote mental health, and avoid discipline problems.

SET REASONABLE LEVELS OF ACHIEVEMENT

Some teachers set requirements that are beyond reasonable limits. The student who is capable of doing slightly above average in geometry is encouraged to strive for perfection—to make a perfect score on timed tests. He is led to believe that he can and should do this, and he feels guilty when he fails to do so. Feelings of guilt which stem from failing to meet the ideals set are common among better-than-average students. Teachers and parents who attempt to push adolescents beyond their ability by holding that perfection is the only goal create emotional hazards for normal development.

Perfectionism is often manifest in directions to students: "Do not be satisfied until your work is perfect"; "Work to get to the top"; "Solve the ten problems correctly in five minutes"; "Everyone should make one hundred percent on this test." Generally, these demands are unrealistic because of the nature of the distribution of abilities among students.

If requirements are set too low—the opposite extreme—students become complacent; they have no need to work for higher achievement or to improve their work or study methods. When students are not challenged sufficiently, they become satisfied with doing just enough to get by or with being near the top with minimum effort.

To help a class set reasonable levels of achievement, the teacher must

understand each student's abilities in relation to the work at hand, help him set realistic goals, and aid him in making progress toward the goals (Fig. 14.6). Every teacher should realize that students are relatively unequal in abilities, and that when equal time is used to develop understandings and skills, differences in achievement become more rather than less evident. Each student needs to have standards that are in line with his ability. When he is frustrated because he cannot reach a teacher-set standard, he may cheat, lie, become unruly, or give up. When the standard is too low, he becomes complacent; and time he should use for improving his performance is spent idling, harassing the teacher and classmates, or engaging in other unproductive activities which tend to disrupt the classroom.

Fig. 14.6. How are reasonable levels of achievement set for each student in situations such as these? (Top, Pinellas County, Florida, Schools; lower, Monona Grove, Wisconsin, High School.)

Closely related to the setting of standards is the use of tests. Tests may facilitate learning when the students know that they are being used to discover the extent to which correct responses have been established, to measure progress, and to overcome difficulties. Usually a teacher-led discussion after the test has been scored serves these purposes. Knowledge of his scores in relation to those of his classmates is also useful when interpreted properly. The student should realize that he may have done poorly because he did not study or is using a method of work which interferes with his progress. The student who has worked hard and done poorly in relation to his classmates but well in relation to his abilities should of course not be

ridieuled or made to feel insecure. As long as curricula cannot be sufficiently broad to fit the varying abilities of school-age youth, students who do their best should not experience failure repeatedly, be "flunked out" of high school, or be encouraged to cheat or use other devious methods for passing tests.

Any test may be used to arouse fear, jealousy, and antagonism among students. It is easy to construct a difficult test and set such a high standard for passing that few students reach it. Students will surely become fearful of tests and antagonistic to them if the teacher writes unfavorable notes to parents, criticizes the class as a whole, or criticizes individual students in front of the class for having done poorly. Taking away privileges and assigning extra work have the same effect.

Students frequently fear tests because they cannot do as well as their parents hope, because they want to excel a sibling or a classmate, or because they want to win recognition based on competitive test scores. Some adults fear all test situations largely because of the way these were handled in school. Testing can be made constructive in the following ways: Make sure that the purposes of the tests for both student and teacher are clearly understood; give tests frequently so that each one does not become so important; give tests only as scheduled; use tests as a method by which students can measure their progress; help students recognize the factors that produce differential test scores; and finally, use the test results as a means of understanding students better and of organizing more effective learning experiences.

These elements of creating an orderly work situation—manifesting confident leadership, establishing a zest for learning, and setting reasonable levels of achievement—are related to understanding students as individuals and also to managing interpersonal group relations.

THE CLASSROOM CLIMATE FOCUSES ON SELF-DISCIPLINE AND GROUP CONTROL

The feelings of students and the expression of those feelings toward one another, toward learning and work procedures, and toward the teacher; and the feelings of the teacher toward the students and the classroom situation—all these forces operating simultaneously are responsible for the social climate of the classroom. Because the social climate vitally affects conduct and work, it should focus on self-discipline and group

control. Social climates may be grouped in four categories: (1) anarchic, (2) repressed, (3) competitive, and (4) coöperative.

ANARCHIC CLIMATES

An anarchic climate is one in which there is great confusion and disorder, in which standards for conduct and work have not been established. This climate frequently appears when a teacher overestimates the maturity of the class and puts the students too suddenly completely on their own. It may also appear when the teacher has a poor sense of educational values or does not know how to guide adolescents. In any event, because there are no accepted group standards of control and no feeling of unity among the members, the conduct of the group is erratic, undisciplined, and disruptive.

The teacher whose sense of educational values is poor allows students to loaf instead of working, to ridicule one another, to express prejudices openly and maliciously, and to settle differences with fists. Such behavior, when condoned by a teacher, leads to great confusion in the class, to disunity, and a poor learning situation.

The teacher who overestimates the maturity of adolescents and suddenly makes them wholly responsible for deciding about work and controlling their conduct fails to recognize that progressing from dependence to independence is a gradual process that needs careful direction. The discussion in Chapter 4 pointed out that laissez-faire leadership does not give students security or establish a feeling of unity and accord among them. This type of leadership led to low work output, much aimless activity, aggressive conduct, and frequent withdrawal from activities.

REPRESSED CLIMATES

A repressed climate is characterized by the absence of student initiative and participation in planning work or setting goals. The students do not talk or work together, or move about. They sit quietly and work individually in accordance with a leader's direction and rules. This climate results when the teacher remains aloof from his students and confines discussion to that between himself and a student. Repressed climates range from apathetic to covertly rebellious.

An apathetic repressed group is one in which the members are thoroughly dominated by their leader. They have lost initiative and no longer

want responsibility for discovering problems or trying to solve them (Fig. 14.7). This climate is exemplified outside the classroom in a caste system—a social organization in which individuals have accepted an inferior status and do nothing about improving it. Also typical is the home where the father rules with an iron hand and subjugates other members so thoroughly that they become apathetic. Some prisons and schools for delinquents are operated in this fashion. This climate is possible in the classroom only when the home and community are also active in repression. Children who have learned at home that it is better to submit than to resist may be perfectly willing to yield to a repressive teacher.

A covertly rebellious group is one in which the leader must constantly suppress surface aggression against him. The members of the group are united in feeling resentment against him and, outside the situation he controls, devise methods for resistance. When there is a unified feeling against the leader, the members use various methods for frustrating him —they refuse to work to full capacity or to carry out his suggestions promptly, and they discover ways for irritating him. In the classroom, loud blowing of the nose, faked crying, loud coughing and clearing of the throat, "accidental" dropping

Fig. 14.7. A democratic nation requires an educational system that fosters initiative and freedom to think, not repression and apathy. (Top, St. Louis, Missouri, Public Schools; lower, Chicago, Illinois, Public Schools.)

of books, and similar devices are indicative of a repressed rebellious attitude.

Continued repression leads to widespread maladjustment because of denial of the satisfaction of the needs for activity, attention, and approval. Any repressed group, whether in the home, the school, or the community, fails to achieve its potential production because initiative is lost or it is directed against the leader. As suggested early in the chapter, a teacher may wish to establish a repressed climate in his early meetings with a class in order to provide a good working situation. This climate should give way as quickly as possible to an atmosphere in which the focus is on the development of self-discipline and group control.

COMPETITIVE CLIMATES

A competitive climate is one in which group members direct their energy to becoming superior to others. Because our society is to a great extent competitive, many adolescents have learned to respond to competition as motivation. However, it is imperative to recognize that our society is also to some extent coöperative, and that, as a civilized society, we are committed not to sacrifice children or less effective adults for the sake of achieving and maintaining superiority. It is false to assume that because our society is somewhat competitive, adolescents should experience failure based on competitive standards in school. On the contrary, it is a well-established fact that children need to be successful in school if they are to meet competitive situations outside school with a fair degree of emotional stability. Delinquents, criminals, and psychotics frequently have histories of many school failures, but few successes.

Competitive climates may be classified as friendly, hostile, and punitive.

Friendly Competitive

Competition in which rules have been established and are followed may be friendly and conducive to higher morale among group members (Fig. 14.8). This, however, depends largely on the rules and on the goals being aimed at. The group leader is responsible for both these factors. In high-school wrestling, for example, definite rules are established and equality in competition is provided for by having only wrestlers of fairly equal weights compete. The rules eliminate danger of serious physical

injury, and a referee decides when violations have occurred. So also with basketball, state regulations hold that competing schools must have relatively equal enrollment. Frequently, competitive athletics provides that the losers take on other losers. When the goal is to be at the top and the desire to win becomes stronger than the willingness to abide by the rules, the friendly feeling is lost.

Competition in the classroom may be friendly and stimulate work activity. The following factors make for friendly competition: Students who are relatively equal are competing; they understand and follow the rules; the goal is higher achievement or a better method of working rather than a material or symbolic reward; the goal is not so desirable that the students evade rules or take unfair advantage of one another to reach it; losing does not result in continuing inferiority feelings or eliminate the desire for further participation.

Fig. 14.8. How may friendly competition stimulate activity and progress in learning? (Top, Monona Grove, Wisconsin, High School; lower, Des Moines, Iowa, Public Schools.)

Hostile Competitive

When members of a group compete with one another for material rewards such as tickets to a movie, for symbolic rewards such as marks, or for favors and approval from the leader, hostility may develop. In reward-directed competition, where all the members participate actively but relatively few obtain the reward, intense rivalry is inevitable. The work output of the whole group will decrease unless rewards are made progressively more desirable. That

of the losers inevitably drops once they realize that they can never win the rewards.

Hostility manifests itself in various ways, among them the following: (1) Friendly relationships tend to break down. It becomes increasingly difficult for Mary to be considerate and interested in Esther's problems, for Esther is doing her utmost to be made class valedictorian, an honor that Mary also wants. (2) Aggressiveness increases. Jim, who wants to lead the violins in the orchestra, verbally attacks his competitor, Bill, and encourages Sally to date Bill so that he will be late for practice or miss it entirely. Bill may take more direct action and hide Jim's music. (3) Withdrawal conduct increases. Frequently the extremely hostile individual hides his feelings in a shell of isolation; he is not satisfied unless he wins, so he withdraws from normal social relationships, devoting his time and energy to beating others. Because he feels that others are out to beat him, he distrusts their motives and thus creates an unsurmountable barrier to normal interpersonal relationships.

Punitive Competitive

In some competitive situations the losers are punished. This is extremely vicious when the individuals in a competitive situation are relatively unequal and when the losers are made scapegoats for the near winners. In punitive competition the leader frequently imposes the punishment; sometimes he arranges for the winners to punish the losers. Under such conditions, hostility is comparatively unrestrained, and open aggression is encouraged.

To some extent, the teacher who fails students who have done their best in a required class creates a punitive-competitive climate. When students are marked according to a predetermined system—for example, the top 10 percent A's, the next 23 percent B's, the next 34 percent C's, the next 23 percent D's, and the lowest 10 percent F's—those who do their best and still receive F's are being punished, for they must repeat the class, substitute some other one, or not be graduated. Equally important, each student who hoped for a mark higher than the one he got may feel that he is being punished for not having done well enough. This may be true of the student who wants an A but gets a B, especially if he needs the A to win a scholarship or some other award that he particularly desires.

Members of classroom groups may punish other members. The French teacher organizes his thirty students into five teams for a vocabulary contest, with the first-place team getting an A, the second-place team a B, and so on; the team in last place receives an F and is given extra work or is deprived of some privilege. In organizing the groups, the teacher picks out the five top students and tells them to choose, in rotation, five other members for their teams. Then the teacher says a French word; each student writes the English equivalent. At the end of the contest, team scores are computed on the basis of the total number all members had correct. In such a situation the better students on the losing teams will undoubtedly penalize the poorer ones for making them lose. The punishment will take the form of not choosing these students in the future, finding fault with them, snubbing them outside class, or making them feel humiliated or inadequate.

These examples show that the way achievement is handled may produce a punitive competitive climate. The teacher as the leader of the class may also consciously or inadvertently create this climate because of the way he handles conduct, as when he encourages students to ostracize other students who have had little or no opportunity to learn the particular code of conduct he wants observed. Here again rewards for measuring up to codes of conduct are put on a competitive basis for students whose ability to achieve them is unequal. The teacher praises a particular kind of conduct, bestows favors on the students who conform, and either punishes or urges their classmates to punish those who do not conform. This is especially vicious when students are punished for conditions they cannot control.

COÖPERATIVE CLIMATES

There is a basic difference in the motives underlying competition and coöperation. The motive for competitive action is twofold: winning, and personal gain. The motive for coöperative action is also twofold: to improve oneself and make a significant contribution to the group. The extent of personal achievement in the two may not vary significantly, but personal feelings do. In well-managed competitive groups, friendliness may be present; in poorly managed groups hostility and overt aggression are present. When members of a group are motivated to improve themselves for the group's advancement, there is no room for hostility or aggression;

Fig. 14.9. Here a senior high-school student acquaints junior high-school students with their classroom for the next year. In what areas of life, both in and outside the school, is cooperation essential? (Chicago, Illinois, Public Schools.)

on the contrary, the group members are encouraged to help one another (Fig. 14.9).

To establish a cooperative spirit among students who have already been strongly conditioned by competition is rather difficult because the winners are often unwilling to give up personal objectives for the group's advantage, and, having been accustomed to receiving rewards, they do not accept group goals as incentives for effort. The "What's in it for me?" attitude may be as difficult to overcome as any form of prejudice. Furthermore, students accustomed to occupying a middle or low place on the competitive ladder may not work toward a group goal because they feel inadequate in their relationships with one another.

Students usually work together better, as we saw in Chapter 10, when the groups are small, the members have similar interests and backgrounds, they are friendly toward one another when the groups are first formed, the goal they are working for is clearly understood, the leader's responsibility in the group is clearly established, and each member knows his responsibilities. The teacher who is planning to divide his class into groups, each group to contribute to a whole-class goal, should

carefully consider all these factors. If his students are relatively immature or already strongly conditioned for competition, he may need to specify the members of each group so that students who are friendly and interested in similar work activities will be in the same group. Moreover, it is often wise to appoint the leader for each group and clearly outline the leaders' responsibilities to the class, to outline the work to be done by each group, and to help each group subdivide its responsibilities among its members. Though the ultimate goal is to have students assume responsibility for self-discipline and group control, the teacher must be careful to decrease his control gradually.

To summarize this discussion of social climates, the coöperative climate is best for encouraging self-discipline and group control. The friendly competitive climate is also useful in this respect. Anarchic climates produce no good results. A repressed climate is sometimes necessary at first to set up a good working situation. The best test of whether students are becoming self-disciplined and responsive to reasonable group control is to arrange coöperative projects, with the teacher's control gradually lessening. If the students are well disciplined and responsive to group standards, they will proceed with committee assignments and various group projects with relatively little need for teacher control of their conduct. The teacher will serve mainly as a resource person, helping the students to obtain information, develop better work methods and study habits, and evaluate the outcome of their efforts.

CORRECTION AND SOMETIMES PUNISHMENT ARE NECESSARY

The disadvantages of using punishment as an incentive to learning and a deterrent to undesirable conduct were discussed in Chapter 8. The threat of punishment was found to be less efficient than reward because punishment requires more policing, has more unpredictable results, and produces more personality conflicts, such as aggression and withdrawal. The need for correction should decrease as the teacher becomes more familiar with his class and establishes good morale and an effective working situation in the classroom.

Punishment to divert a student's attention from his antisocial conduct and to prevent him from interfering with the progress of the class may be the most constructive procedure a teacher can use under certain con-

ditions. It may be necessary to punish a student in order to maintain the group morale at a high level.

Problems involving the use of punishment involve (1) criteria for deciding whether to punish, (2) time of punishment, (3) form of punishment, and (4) severity of punishment.

CRITERIA FOR PUNISHMENT

Two questions are helpful in deciding whether to use punishment: "Will punishment help the student to increase self-discipline and self-control?" "Will it contribute to a more effective working situation for the class?" These two questions frequently cannot be answered positively; hence the teacher decides on punishment for the good of the class. If he had time to investigate the causes of the misconduct, punishment might not be necessary. But serious misconduct may arise suddenly and action has to be taken immediately to prevent the situation from getting out of control or the class activities from being disrupted.

Punishment is an effective means for diverting attention from undesirable activity. Two students who are chasing each other in a crowded corridor may be brought up sharp by a teacher's command to stop and his order for both to go into the classroom. A student in the woodwork shop may maliciously produce a grating sound by using a saw on metal; as a result, the other students quit work. A student in the crafts class may wander from one student to another, interfering with their work and accomplishing nothing constructive himself. If all of these teachers ask such students to stop and give them something to do, like cleaning the room, it may divert their attention from their antisocial conduct.

The following criteria are useful in deciding whether to punish: (1) How serious is the misconduct? Generally, cursing, using vulgar language, destroying property, fighting, and the like must be stopped as soon as they appear. Immediate punishment may be the most constructive solution for the good of the class. (2) How long has less serious misconduct persisted? If a student persists in less serious but disruptive conduct, punishment may be necessary until he stops acting this way. (3) How seriously does the student's conduct interfere with the group's progress? When there is no great interference, it is better not to punish immediately but to search for the causes of the student's behavior and try to work out a solution.

According to one theory, punishment should be given when the misbehavior occurs. According to another theory, the misbehavior should be stopped but the punishment should be given later.

John, an eighth-grader, uses profane language in the classroom. Should he be punished then or later? *According to the first theory,* the punishment should be imposed immediately so that its unpleasantness will be closely associated with the misconduct. In other words, this theory holds that punishment will condition John not to curse again because he associates the punishment with using profane language. According to the second theory, John should be told that he has committed a serious offense and will be punished later. The teacher arranges to see him at some later time, and punishment is decided then.

In deciding whether to punish immediately or later, the teacher must analyze the seriousness of the offense and the probable effects on the student and the class. He should also consider the form of the punishment.

FORM OF PUNISHMENT

The form of punishment should be related to the specific misbehavior. The student who maliciously damages school property or his classmates' belongings should be required to make restitution. Any malicious destruction of property may be handled in this way provided it does not cause extreme hardship to the offender and thus lead to more serious misconduct.

Loss of privilege is frequently the punishment for using profane language, cheating, or creating a disturbance in the classroom—offenses for which there is no closely related punishment. Extra work also is in this category. Here is one of the difficult problems in using punishment. When the punishment bears no close relation to the misconduct, it is probable that the punisher and not the punishment will be associated with the misconduct. Thus when the punisher is not present, the student continues his misconduct.

Forced apology to teacher or classmates is sometimes employed, as is also expulsion from the room or school. These forms of punishment are severe. Unless the student's conduct seriously interferes with class progress, they should not be used; some hold that they should never be used.

Mass punishment is extremely dangerous, particularly when the entire class or several members of a group are punished for the offense one student has committed. It is unwise to try to force adolescents to reveal the identity of an offender by punishing all of them. Strikes of the entire school or of a class against a teacher are frequently started in this way.

For minor offenses that incur punishment, it is best not to call the attention of the class to either the offense or the punishment. The teacher should handle the situation firmly, quickly, and with the least disturbance to the class. Some classmates usually identify themselves with the student being punished; hence advertising it causes widespread resentment against the teacher. Also, the student loses prestige among his classmates and may become antagonistic toward the teacher. In all punishment except that for serious offenses, the effective procedure is to get it over with quickly, to make sure that no resentment continues between student and teacher, and to start productive work immediately.

SEVERITY OF PUNISHMENT

When punishment is so severe that the student does not want to return to the classroom or to work with the teacher who administered the punishment, the teacher can no longer help the student. The opportunity for helping the student increase his powers of self-discipline is lost, and the punishment intensifies his maladjustment. Except for extremely serious offenses which markedly impede class progress, punishment should never be this severe.

No one can predict accurately how severe a punishment is for an individual student unless he knows him and his home situation. A sarcastic verbal attack may be more severe for the timid, shy girl than a hard whipping for the boy who is whipped frequently at home. To decide concerning the severity of punishment, the teacher must take into account the student's feeling about it.

In summary, punishment is so fraught with unknowns that its use should be minimized. These generalizations may help: Realize that misbehavior is a symptom of maladjustment. Try to discover its causes before giving punishment. Punish if this is the only effective way to divert attention from undesirable conduct or to prevent a student from seriously interfering with the progress of his classmates or destroying group morale. Administer minor punishments yourself and get them over

quickly. Whenever possible, relate the punishment to the offense. Consider the severity of the punishment carefully, and realize that severe punishment may deprive you of any opportunity to help the student.

SOME STUDENTS REQUIRE SPECIAL TREATMENT

Misbehavior is a symptom indicating that something is wrong with the classroom situation or that the student already has undesirable attitudes and conduct that manifest themselves in the classroom. In either case, punishment itself does not help the teacher discover the cause of the misbehavior. Students who have to be punished usually need special treatment.

Special treatment is also required for the withdrawing student. The shy adolescent, the daydreamer, and the isolate do not disrupt work as aggressive students do; therefore they are frequently overlooked. Withdrawn students may be more maladjusted than the aggressive because they have already ceased to fight back and have lost any initiative for seeking attention and approval.

What are the basic elements of a remedial program for special treatment? What does the teacher do to help the personally maladjusted or antisocial student? The major steps in a remedial program involve analyzing the classroom situation to determine if the causes are to be found in the classroom itself, analyzing the adolescent to discover the causes of his behavior, and planning a program for special assistance and putting it into action.

ANALYSIS OF THE CLASSROOM SITUATION

We have already discussed classroom procedures and group situations that frequently lead to aggression and withdrawal. In the well-managed classroom where learning activities are organized to meet the interests and needs of adolescents there are relatively few discipline problems. Except in schools with low morale among both the student body and the faculty and in classes with many students that show antisocial conduct, it is probable that the causes of most discipline problems are to be found in the curriculum organization, the teacher's direction of learning activities, or his management of interpersonal relationships in the classroom (Fig. 14.10). Any of these may give rise to undesirable conduct.

The situation in which the misconduct appeared should be analyzed.

Giving an unreasonable work assignment as when students are asked to do twenty problems in ten minutes when only a few students can finish them in that time, arbitrarily demanding complete silence while the teacher reads poems in which the students are not interested, asking the girl who is unhappy about the clothes she has to wear to give a five-minute oral report—any of these situations may produce undesirable conduct in the classroom.

In some situations the teacher may have to alter procedures which are generally effective for most of the students in order to provide different treatment for an individual student. Here the classroom situation itself is not the direct cause of the maladjustment, but the student's reaction to the situation is not good.

Fig. 14.10. A situation such as this suggests conditions which if continued might result in poor mental health and misbehavior. What are the conditions? (Madison, Wisconsin, Public Schools.)

ANALYSIS OF THE STUDENT

The adolescent's learning environment includes his home, his neighborhood, and the broader community as well as the school. His attitudes and behavior are shaped by his experiences with other people, and to some extent by heredity. His reactions in a particular situation may be greatly influenced by his attitudes toward the situation and by his outlook and plans for the future. Thus, a comprehensive analysis of all aspects of his behavior is necessary. Ordinarily, this analysis begins with an interview between the student and the teacher to obtain initial information; other information is then obtained if needed, as described in Chapter 2 in connection with the observational case study. For the student who grossly or repeatedly misbehaves and the one who withdraws, the most important fact to learn in the interview is how the student feels toward himself in the particular situation, for this largely determines his behavior. If he feels happy and comfortable about

himself, we say that he has an adequate self-concept; if he feels unhappy or dissatisfied, he has an inadequate self-concept and is likely to withdraw or to engage in unacceptable conduct as a means of bolstering his feelings as a worth-while individual.

In connection with the relation between self-concepts and behavior, each of seventeen experienced teachers, working with the author, identified the student in his class who had the poorest feelings toward himself and was also the most withdrawn or most troublesome, and the student who had the best feelings toward himself and was a constructive influence on conduct in the class. Other characteristics of the seventeen students with the poorest self-concepts and the seventeen with the best are shown in Table 14.1. The columns headed Below, Average, and Above indicate how a particular student compared with the entire class on the various characteristics listed. The study also noted for each student physical defects, occupation of father, number of children in family, and other similar information.

TABLE 14.1. Characteristics of Students with the Most Adequate and the Least Adequate Self-Concepts

Characteristic	Most Adequate			Least Adequate		
	Below	Average	Above	Below	Average	Above
Age	1	14	2	1	12	4
Height	2	14	1	2	11	4
Weight	3	11	3	3	9	5
Physical appearance	1	9	7	5	11	1
Clothing	0	8	9	5	10	2
Intelligence	0	2	15	8	8	1
Reading achievement	0	2	15	9	7	1
Arithmetic achievement	0	3	14	12	4	1
Speaking ability	0	6	11	5	7	5
Health	0	6	11	5	7	5
Attendance	9	3	14	2	8	7

Comparison of these two groups leads to the following conclusions: (1) Age, height, and weight are not closely related to the adequacy of the self-concept and to classroom conduct. (2) Physical appearance to some extent and clothing to a more marked degree are related to the adequacy of the self-concept. (3) The students are sharply separated as far as intelligence and achievement are concerned, the students with the adequate self-concepts being typically above the average of the class and

those with the least adequate being average or below. (4) Speaking ability, health, and attendance are also better in the students with the most adequate self-concepts. The study showed no differences between the two groups in number of sensory defects and number of children in the family. The fathers of a larger percentage of the students with the most adequate self-concepts were in the professions and business than was true of the other group of students.

The conclusions drawn from the study are as follows:

Since students with higher intelligence and achievement have better self-concepts with resulting better class conduct, teachers are faced with the problem of finding ways to help students with lower abilities experience success feelings to bolster their self-concepts.

Grouping students according to achievement level helps the students of lower ability experience success. At the same time all students must work together as a whole group on some activities so that the lower achievers will not associate the grouping with feelings of general inadequacy.

The teacher must be on the alert to find areas in which the students of lower ability excel. Some of these areas may be sports, art, music, other manipulative tasks, and classroom routines. Wherever an interest or ability is found, it should be incorporated in the total class activity and the student should be commended for anything he does well.

Parent-teacher conferences are important. These conferences often bring to the attention of the teacher circumstances which are causing a child to have difficulty in school. Skillful treatment by the teacher can help the parent to accept the level of work the student is able to achieve, and this may relieve pressures on the student at home.

When the teacher accepts the student at his own ability level and helps him find satisfaction in the things he can do, we may be on the way to helping him improve his self-concept and classroom conduct.

There does not seem to be much the school or teacher can do regarding poor self-concepts which arise from lower socio-economic status of the parents when the larger community gives the people of lower socio-economic status low prestige. However, the student with lower socio-economic status can be accepted as a worth-while student by the teacher. The teacher and other school people may help this student with matters regarding personal appearance, clothing, and health. Also, the classroom must be a place where students are not discriminated against by the teacher or other students on matters over which they have no control.

Understanding how the student feels toward himself in a situation is necessary if the teacher is to understand behavior. Further, this under-

standing usually gives clues regarding what is needed to help the student. In some cases the help can be given directly by the teacher; in other cases it must come from people specialized in other fields such as counselors, physicians, social workers, and speech therapists.

A PROGRAM FOR SPECIAL ASSISTANCE

After the situation and the student's self-concept have been analyzed, a program of special assistance may be needed. In some cases the assistance may be provided entirely by changing his attitudes or helping him solve his problem in counseling interviews. In others, changes in the school program or in the student's attitudes toward his home may be necessary. Generally, special assistance should begin in the areas over which the school has immediate control—the attitudes of the student and the instructional program. Frequently, special assistance calls for getting the student to want to help himself and then setting up situations in which teachers give him special assistance.

The following students may cause serious problems in the classroom and they may be helped by interviews which lead them to change their attitudes: (1) the student who withdraws or overcompensates because of a physical defect such as poor vision which necessitates glasses; (2) the student who demands undue attention after prolonged illness; (3) the student who withdraws or becomes aggressive because of a developmental problem such as being fat or short or maturing unusually late or early; (4) the student who as a member of a minority group feels he is being treated unfairly when he is not; (5) the student who, because his economic status is either very rich or very poor, does not associate harmoniously with the other members of the class; (6) the student who has unrealistic goals in terms of his own aptitudes and abilities.

Sometimes the teacher may need the coöperation of other teachers who also have the student in their classes. Coöperation from other teachers is required for the following students: (1) the student with low ability who is failing in several classes; (2) the student with high ability who creates a disturbance because he is not sufficiently challenged or who has already developed the idea of getting by with the least effort; (3) the student who for some reason not under his control is ostracized or ridiculed by his classmates; (4) the student who is already far behind his classmates and has given up trying to catch up in his work; (5) the stu-

dent who has chosen a poor curriculum or coeurricular program; (6) the student who cannot keep up in school because of work or other responsibilities outside school. In all cases in which the maladjusted behavior is related to the student's characteristics and the requirements in various classes, the special program includes all the teachers with whom the student has classes. Unless teachers are willing to coöperate, it is unlikely that these programs will be successful.

The teacher's skill in working with parents is probably the most important factor in deciding whether to try to make some change in conditions in the student's home. When the home is involved, it is often easier to change the student's attitudes toward his parents than to try to change those of the parents. The following are students whose home situation should be changed or an understanding established between them and their parents: (1) the student whose parents compare him unfavorably with siblings; (2) the student whose parents expect him to achieve beyond his abilities; (3) the student whose parents insist on an unwise choice of education or career; (4) the student who is neglected financially, emotionally, socially, or morally; (5) the student who is overprotected; (6) the student who has rebelled against his parents because their attitudes or customs are different from those he is taught at school.

In working out a special program where the home is involved, the teacher should enlist the support of other school people and community agencies whose specialty is working with the home. When the teacher takes the initiative in making contact with the parents, it should be assumed that any change that is made will result from the parents' knowing that he is genuinely interested in the welfare of their child and their willingness to give his suggestion a trial.

SUMMARY

The purposes of discipline are twofold: to help the student progress from dependence on adults for direction and control to self-direction and self-discipline, and to set up an orderly classroom situation so that learning proceeds smoothly for all the students. To achieve these goals, it is imperative that the student be understood as an individual and that an orderly work situation be established from the start. Showing confident leadership early in meetings with students, maintaining their zest for the learning activities, and setting reasonable levels of achievement are essen-

tial to promoting mental health and encouraging self-discipline and re-sponsiveness to group control.

The social climate of the group is intimately connected with discipline and mental health. Generally, a coöperative climate is best for self-discipline and group control. A friendly competitive climate is also de-sirable in some cases. Anarchic and repressed climates do not lead to desirable results; however, there may be times when the teacher must be repressive in getting a good working situation started. In a coöperative climate the teacher serves primarily as a resource person, aiding the stu-dents to secure information, to develop better study habits and practice procedures, and to evaluate the outcome of their efforts. With some stu-dents, punishment, or at least a form of correction which the student in-terprets as punishment, may be necessary.

Any punishment should take into consideration the seriousness of the misconduct, the effects of it on the class, the characteristics of the student being punished, and the effects of the punishment on his future behavior. Whenever severe punishment rather than minor correction is necessary, special treatment should be considered so that the student will develop attitudes that will make future punishments unnecessary. By examining the situation preceding the misconduct and studying the student in the given situation, the teacher can usually identify the causes of the miscon-duct and devise special treatment to eliminate them. In the case of some students, the teacher may need considerable help from other persons in formulating a good program of special treatment.

Questions and Activities

1. Discuss the meaning and purposes of discipline, and disciplinary measures.
2. Evaluate Mr. Merriman's description of the classroom from the standpoint of developing a good work situation and promoting the mental health of the students.
3. Arrange in order of decreasing importance the five principles listed in this chapter, from the standpoint of emphases your high-school teachers gave them. List the same principles in the order in which you think attention should be given to them in high-school classes today, and discuss briefly why you put them in that order.
4. Describe briefly the two most different procedures you have seen used by

teachers to secure an orderly work situation. How did the students respond to each one?

5. Discuss briefly the characteristics of anarchic, repressed, competitive, and coöperative social climates.

6. Arrange for a role-playing situation in which one person takes the role of a teacher strongly favoring a repressed climate; a second, a friendly competitive climate; a third, a hostile competitive climate; and a fourth, a coöperative climate.

7. Briefly describe situations in which a teacher might try to establish a repressed, a friendly competitive, and a coöperative climate.

8. List and discuss briefly the criteria for deciding whether to punish a student.

9. How do time, form, and severity of punishment affect a teacher's use of punishment?

10. List the different forms of punishment you have recently seen teachers or parents use. What seem to be the controlling factors in whether or not a student is punished and how severely he is punished?

11. On the basis of your personal experiences and reading, discuss whether students with the most inadequate self-concepts have the same characteristics as reported in Table 14.1.

12. Under what circumstances is it desirable for a teacher to secure assistance from others in treating a disturbed or misbehaving student?

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15.

Guiding and Counseling

As suggested in Chapter 1, a primary role of the teacher is as a guide and counselor of young people. Whereas some students can satisfy their developmental needs with little assistance from the teacher, the large majority need considerable guidance in making and executing plans in connection with the curricular and cocurricular program, choosing a career, and selecting leisure-time pursuits. In addition, most students at some point during Grades 7–12 could profitably use advice from a wise, skillful adult about relationships with teachers, family, and classmates, about health, finances, sex, religion, and other personal problems involving emotions and values. Most of this assistance must be provided by interested, competent teachers. Their role in guidance and counseling will become more apparent in the discussion of these major generalizations:

1. Guidance is essential in the regular program of instruction.
2. Guidance is emphasized in the homeroom and core class.
3. Guidance is emphasized in cocurricular activities.
4. The teacher counsels individually with students.
5. The teacher participates in case conferences.
6. The teacher refers students for special assistance.
7. Special teachers meet the needs of special groups.
8. A specialist coördinates the guidance program.
9. Teachers help formulate guidance policies.

GUIDANCE IS ESSENTIAL IN THE REGULAR PROGRAM OF INSTRUCTION

The teacher's role as counselor and guide has been emphasized consistently in earlier chapters, and the following major techniques of guidance have been discussed: understanding the student, working with him as an individual, working with the class as a group, working with smaller groups within the class, working with parents, and coöperating with other teachers and specialists when a student is not understood well or needs special assistance. Using the techniques appropriate to the situation, the skillful teacher can fulfill the guidance needs of most students in the regular program of instruction, provided he accepts this as his responsibility. But if the majority of teachers in a school do not accept this re-

sponsibility or if the instructional program does not consider variations in student interests and abilities, more problems are created than can be handled by even a large number of specialists in guidance. As will be brought out later, persons with specialties other than teaching are also required in the modern junior and senior high school.

We review briefly some features of classroom instruction, already discussed, which emphasize the teacher's guidance role. The teacher plans unit and daily activities as required for the varying interests and abilities of his students (Chapter 6). In initiating these activities, he works with the students in clarifying individual and group goals, he studies the characteristics of the students, and he creates a favorable emotional atmosphere for learning, including individual and group control of conduct (Chapter 7). While activities are being completed, the teacher provides for goal reorientation and modifies objectives, content, and activities as required by the varying interests and abilities of his students and the class as a whole (Chapter 8). He assists the students in self-appraisal, the focus being on the individual student's progress (Chapter 9).

Fig. 13.1. Helping students to secure information, to make plans and carry them out is one of the most important objectives in guidance work. What opportunities do these situations present to achieve this objective? (Top, School District of Philadelphia center, Wilmington, Delaware. Public Schools; lower, School District of the City of Berkley, Michigan.)

1. Homeroom organization: Homerooms are organized so that all the pupils are at the same grade level. They are grouped as freshman, sophomore, junior, or senior homerooms. The organization of individual homerooms is left to the discretion of the respective homeroom teachers. The teacher is free to have officers, monitors, or other special representatives in the homeroom. Homeroom teachers at each grade level form a committee which is responsible for group or class activities; a teacher-chairman appointed for each committee assumes the responsibility for directing the activities.

2. Attendance: The homeroom teacher is responsible for checking and reporting attendance, taking care of excuse forms, and discussing with parents, whenever possible, all cases of irregular attendance, tardiness, and part-time absence.

3. Making out pupil program and nativity cards: The teacher sees that the pupil program card and nativity card (identifying information) are properly made out and that the information is recorded accurately.

4. Report cards: Homeroom teachers take care of distributing report cards to their students and collecting them.

5. Homeroom teacher's record: A four-page cumulative record (the front and back covers of it are shown in Figs. 15.2 and 15.3 respectively) is issued to the freshman homeroom teacher, who passes it on from year to year to the student's next homeroom teacher.

6. Study slips: Study slips (schedule of classes) are filled out for the next semester about six weeks before the end of each semester. Before the study slips are due in the office, the teachers talk with the pupils about their plans during the homeroom periods. The four-year plan of the homeroom teacher's record is the basis for this counseling.

7. Requests for change in pupil program: Changes in students' programs at the beginning of each semester may be necessary for many reasons, including failure and changes in educational or vocational plans. The homeroom teacher considers each such request, except in case of failure, and approves or disapproves it as the evidence indicates.

8. Requests for short hours because of outside employment: Handling requests for shorter hours in school is one of the guidance coördinator's several responsibilities. A student may be employed, but only with his parents' approval. The homeroom teacher is notified that he has permission to work, and he is accordingly excused for one or more periods of the school day.

9. Testing and personality evaluation program: The *Otis Group Mental Ability Test* is given each freshman and also to pupils who transfer to the school. The *Kuder Preference Inventory* is given to all sophomores. *Juniors* are evaluated by teachers on certain personal traits, and the senior English and psychological tests are given to all seniors. In addition, other tests are made available by the coördinator and/or director of counseling at the request of parents, teachers, or pupils. Test results are entered in the homeroom teacher's record, and are also filed in the central office. The teacher may consult with

BROAD RIPPLE HIGH SCHOOL HOME ROOM TEACHERS RECORD

1. Name			H R
2. Address		Date of birth	
3. Father or guardian		Entrance date	
4. Name of mother or person in charge			Boy
5. Business address of father			Girl
6. Age at entering B R H S Yr Mo		School last attended	
7. Do you live with father? Mother?		Neither? Guardian?	
8. Do you intend to graduate from high school?		When?	
9. Do you intend to enter college?		Where?	
10. What course do you intend to take in high school?			
11. What is your father's occupation?			
12. Is your mother employed outside the home?		If yes, where?	
13. Your probable occupation 1		2 3	

14. Are you employed?   Where?
If answer is "no," name your last employer

15. Special interests outside of school
(Hobbies)   1   2   3

16. Underline your special problems   Hearing   Health   Speech   Sight   Crippled

17. Awards, citations, honors, etc	18. Extra curricular activities: athletics, etc
1.	1.
2.	2.
3.	3.
4.	4.

19. Test Records	Date	Form	Score	20. Citizenship—Notes
Grade School Rating				
Grade School I Q				
Henmon-Nelson Test				
Otis Mental Ability				

Fig. 15.2. Front cover of the cumulative record folder, Broad Ripple High School, Indianapolis, Indiana.

the director of counseling about their interpretation.

10. State requirements and information about high-school graduation: The homeroom teacher should know Indiana's requirements for graduation and the entrance requirements for many colleges in that state. He should also have general information about graduation requirements of the particular high school. This information is available to every homeroom teacher in the *Manual*.

30. PERSONALITY RATING RECORD

Date of Rating

Appearance

Conduct

Cooperation

Dependability

Emotional Control

Industry

Initiative

Integrity

Leadership

Manners

1 High   3 Average   5 Low

31. RECORD OF EVIDENCE OF INTEREST

	Kuder Percentile Rank
1. Mechanical	
2. Computational	
3. Scientific	
4. Persuasive	
5. Artistic	
6. Literary	
7. Musical	
8. Social Service	
9. Clerical	
10.	

32. RECORD OF TESTS

Name	Date	Form	Score

Remarks

33. RECORD OF ACTIVITIES, WORK EXPERIENCES OR OTHER INFORMATION

Fig. 15.3. Back cover of the cumulative record folder of the Broad Ripple High School.

11. Honor point system, honor roll and point average, and class standing: Each semester the homeroom teacher computes the number of credits earned by each student, the number of credits undertaken, and the number of honor points earned. The director of counseling computes the students' standing in the class from highest to lowest.

12. Subject order for all school records: In recording subjects taken by the student for permanent school records, the teacher follows a school-wide form.

13. Class elections: Nominations and elections of class officers are carried on during homeroom periods by the homeroom organization.

14. Student council elections: The student council consists of pupils elected from the four classes. Officers are elected by the members of the council. The homeroom teacher's responsibilities are primarily to announce and publicize elections.

15. Services of the director of counseling: The homeroom teacher may confer with the director of counseling in matters concerning tests and their interpretation, and educational and vocational planning with students.

16. Career talks and conferences: During the junior year the homerooms sponsor an extended series of short talks by pupils who are interested in various careers. The school also coöperates with various agencies in arranging career conferences.

17. Conferences with college representatives: Visits by representatives of various colleges are announced during the homeroom period and pupils interested in conferences are notified. One evening each year is set aside for conferences with these representatives, parents, and pupils.

18. Class-sponsored activities: The principal activities sponsored by the four classes are: freshman—mothers' tea and conference; sophomore—career conferences; junior—junior-senior reception, career and vocational talks, junior-senior assembly; senior—class day, senior mothers' tea, baccalaureate, and commencement.

19. Subscription and ticket sales: Subscriptions to the school newspaper and yearbook are solicited during the homeroom period.

20. Scholarships: Beginning in the freshman year, the homeroom teacher provides students with scholarship information; he refers special questions to the director of counseling.

21. Homeroom transfers: Pupils are transferred from one homeroom to another primarily on the basis of credits completed.

The above outline indicates some administrative uses of the homeroom and also clerical duties performed by the teacher. However, the most important decisions that the student makes about his courses, his cocurricular activities, and eventually his career are based on discussions with the homeroom teacher. Further, though this is not too clearly brought out,

personal problems, difficulties with school work, and the like are taken care of in the conference period held by the homeroom teacher. This teacher is the key person in uncovering any problem a student may have. The dean of girls and the dean of boys have as their primary responsibilities conferring and helping students who have financial problems, counseling with deeply disturbed students, and conferring with parents. The director of counseling provides overall coördination of the guidance program; he serves mainly as an administrator and assistant to the teachers in interpreting test results and other information. The coördinator administers the individual and group testing programs, handles employment services, and takes care of the distributive education work. The nurse keeps health records for each student and works with individual students and their parents on many health problems. The social worker works directly with the student, with school personnel in connection with him, and with his home. The social worker deals chiefly with situations involving lack of coöperation at home, homes of low economic status, and broken homes. An assistant principal supervises all the work and problems connected with attendance. These specialists are thus available to the homeroom teacher for referral.

In other schools, the homeroom serves some of the same functions as the homeroom in Broad Ripple does, but there is a more definite program for group-guidance activities. Topics such as becoming acquainted with the school, using the library, forming good study habits, planning study schedules, finding hobbies, and planning careers are given systematic attention.

GUIDANCE IN THE CORE CLASS

A core class was defined earlier as any class that meets for more than one class period and in which material from at least two subject fields is combined. Many core programs are in operation, principally in Grades 7, 8, and 9. The most common combination of subject fields is English and social studies. In senior high schools which have class periods of seventy minutes or more, a certain class required of all students in a grade—for example, eleventh-grade social studies—takes care of the guidance functions performed by the homeroom or the core class in other schools.

The longer class period has advantages over the shorter period for guidance in that the teacher has fewer students each day, a longer period

Fig. 15.4. What aspects of career planning might be handled in the core class of the senior high school? How could discussion of a college education and military service be related to the subject matter of the core class? (Madison, Wisconsin, Public Schools)

of time to know these students well as individuals, and better opportunity to allot time for individual conferences, group activities, and pupil-teacher planning. Furthermore, if the core class is organized on the basis of a unit plan of instruction, guidance emphases such as study habits, work methods, the regular classroom and cocurricular programs, occupational information, and career planning, can be taken care of well (Fig. 15.4). The longer period also allows the student to develop closer identity with the school. Completely departmentalized instruction, especially when class periods are short as in Broad Ripple High School, gives little opportunity for the teacher to know the students well or for the students to feel that any one classroom or activity is intended particularly for him. Group interaction and friendships are promoted in the longer class period better than in the short periods. The core classroom becomes home to the student. If these conditions are to prevail, the teacher of the core class must accept his guidance role fully and be skillful in conducting individual interviews with students and in managing small-group activities.

GUIDANCE IS EMPHASIZED IN COCURRICULAR ACTIVITIES

As will be shown in Chapter 16, the cocurricular program is of greater help than the regular classroom program to some high-school students in developing a well-rounded personality and acquiring interest and skill in leisure-time pursuits. Furthermore, the teacher incorporates student planning of projects and activities in some cocurricular activities, thus making learning more meaningful than it is in some regular classes. To achieve desirable results such as these, the teacher in charge, or sponsor, must confer with individual students, particularly class officers; with small groups such as committees who are planning and carrying out parts of the program; and with the whole class on such matters as social-emotional control, wise use of time, relationships with the opposite sex, social amenities, student government, and relations with adults in the community. All these are guidance activities.

How does guidance function in connection with the student's selecting cocurricular activities? Students are helped to select appropriate cocurricular activities just as if they were planning a regular classroom program. Furthermore, student participation may be encouraged or restricted. Thus, the shy, withdrawing student is encouraged to enter at least one cocurricular activity, but a more outgoing student is definitely limited as to the number of activities and the amount of school time be may spend in cocurricular activities. To accomplish this effectively, the teacher must confer individually with some students and with small groups of others. Alphabetical or other mechanical assignment to cocurricular activities is no better here than it was in the case of the various tracks and elective courses.

How actually sponsoring and leading cocurricular activities involve guidance will be treated more fully in Chapter 16. Suffice it to say here that the cost of such activities to the student is kept down and that they are mostly carried on during school hours so that all eligible students may participate. Further, the sponsor's methods focus upon student self-direction and group control. This focus means that a primary purpose of guidance is achieved, namely, assisting the student to cope with his developmental needs with a minimum of adult control and a maximum response to individual and group controls. High student interest and a permissive attitude on the part of the teacher are found in many cocur-

ricular activities; hence students have many opportunities to practice an adult type of self-direction and to enjoy informal association with both agemates and the teacher.

THE TEACHER COUNSELS INDIVIDUALLY WITH STUDENTS

Counseling involves a face-to-face conference between the counselor and the student, the purpose of which is to help the student clarify his feelings and problems, make better adjustments to himself and others, and learn to plan wisely. The number of counseling conferences needed for individual students varies. One student may have a good self-concept, make decisions easily and wisely, and have few adjustment problems involving emotions; another with a poor self-concept may have many problems and therefore need counseling at frequent intervals over long periods of time. If the teacher is skilled in counseling and if the time and a place appropriate for it are available, he can effectively counsel students who are not severely disturbed.

To be effective in counseling, certain attitudes, understandings, and skills are requisite (Fig. 15.5).

Fig 15.5. How does a teacher learn how competent he is in counseling? (Milwaukee, Wisconsin, Public Schools.)

Basic to counseling are attitudes toward the student and the nature of the information to be obtained. (1) Each student is worthy of respect and is therefore accepted and not rejected. (2) The student can be helped in solving problems and in making plans. (3) Personal problems which students discuss with the counselor must be held in strict confidence. One anecdote illustrative of each principle makes clear the crucial importance of attitudes in counseling.

Mary, a junior, says that she left home two nights ago because her parents do not buy her nice clothes. Early in the interview the counselor discovered that the real reason is her parents' refusal to allow her to continue dating a man of twenty-two. When her parents found that Mary had repeatedly lied about this, they refused to let her go out, so she left

home and is now living with a girl friend. Mary says that she never wants to see her parents again because they are too strict. Is Mary still worthy of respect as an individual? Can the counselor who answers negatively help her solve her problem?

Jim, a senior, has been picked up by the police for stealing on three occasions during the past year. Currently, he reports to a judge once each month in accordance with a suspended jail sentence. Jim is above average physically and mentally and likes physical activities in school, but he shows disrespect to teachers and has no interest in academic classes. To graduate, he will have to remain in school for one semester beyond the senior year unless special arrangements are made. Can Jim be helped?

While scuffling with another boy in the laboratory during a science class, Bill accidentally knocked a microscope off a table. The teacher was out of the room at the time, and no one reported the breakage to him. Later, he found the broken microscope and withdrew laboratory privileges until the culprit was identified. The principal called the whole school into assembly in an effort to discover the guilty student. Bill does not discuss his problem with the teacher or principal because he is afraid that he will be expelled from school; instead, he goes to a counselor. He is dejected and conscience-stricken. He tells the counselor what he has done. Should the counselor report him at once to the principal? Should the counselor work with Bill until he himself wants to talk to the principal and help him in presenting his case? The counselor who reports Bill to the principal without the boy's knowledge will probably have few students coming to him voluntarily in the future.

Major understandings needed to counsel high-school youth are provided in three areas of study: the psychology of adolescence, the psychology of human adjustment, and appraisal of the individual. Ordinarily, courses leading to a master's degree, and internship under a skilled counselor, are needed to acquire these understandings. It is especially important that teachers who serve as counselors understand adolescents' problems in the particular school and community, the nature of adjustment processes, and their own limitations in counseling.

To organize and conduct a counseling interview successfully the counselor must be able (1) to outline general plans for the interview, (2) to establish rapport with the student quickly and effortlessly, (3) to

help the student identify and state his problem, (4) to help him understand information about his problem and to outline procedures for obtaining other information, (5) to help him make plans for solving his problem, (6) to know when to refer a student to another person for counsel, and (7) to end the interview or series of interviews. Teachers are frequently helped in acquiring these skills by working with a skilled counselor. The suggestions which follow are appropriate for teachers who do not have this opportunity but who are assigned counseling duties:

1. Be courteous and friendly, regardless of the student's emotional state. For example, if the student is angry because he received a much lower grade than he expected, be calm and friendly as you ask him to tell you how he feels about the situation and what he thinks should be done about it.

2. Reflect the student's feelings in your comments and questions until the student gets his grievance "off his chest." Ask questions of the withdrawing or defensive student to keep him talking about his problem, but do not cross-examine. Unless severely upset, the student will give you all the information you need without much questioning.

3. Accept what the student says without contradicting him. If emotional, he will not accept contradiction from another person. If he is allowed to express his feelings, he himself will recognize when what he says is not factual.

4. Use words which the student understands, for a counseling conference is basically a learning situation for him.

5. Reassure the student whose main problem is lack of assurance. A pat on the back and praise for what he has done well is all that is needed in some cases. But never deceive a student by telling him that everything is all right when it is not.

6. Provide the student with the necessary information about any area in which he is in the process of making a decision—choice of courses, co-curricular activities, friends, dating, and the like. Only give him enough information, however, to get him started securing information for himself if he can readily do so. In many places throughout his school life, the student needs information that is based upon adult experiences and he cannot readily get it except from adults. This is especially true in all situations involving conflicting values.

7. During the conference, summarize what has happened; do this

yourself or ask the student to do it. For example, asking an emotionally upset student to summarize what has been said may help him to think more rationally about his problem. In discussing career choices, such a summary aids the student in clarifying his choice.

8. Encourage the student to propose a plan of action or to give a reasonable explanation of his problem. You may need to make suggestions to the student who apparently cannot bring himself to do this. You may find that such a student is severely disturbed emotionally or is faced with unfavorable conditions at home or in school which he cannot control.

9. Close the conference by summarizing what has happened, having the student do this, stating what apparently has been agreed upon concerning plans, or arranging for another conference.

After the conference, a written note might be made for the student's folder. If action by you is required, start it as soon as possible. For example, if some condition in the student's home or school life should be changed, initiate such changes yourself or go to the person who can. If the student is so severely disturbed that you cannot help him, begin referral procedures. After a series of conferences, further observation of the student is required to note any improvement; this follow-up helps in deciding whether future conferences may be helpful.

Each teacher, whether he wants to or not, must counsel students at some time. It is rare to find a student who can solve his problems without individual guidance from adults. The student's success or failure in solving his problems and the help he receives from teachers and other adults are important in determining his success or failure as an adult. A little time spent with a student in individual counseling can save years of therapy later in his life or even years in a penal institution.

THE TEACHER PARTICIPATES IN CASE CONFERENCES

A tenth-grader who has an IQ of 150 and made mostly A's in the ninth grade is not doing well in any of his classes. Each of his teachers is aware of this but cannot find a way of overcoming it. In a conference with this student the school counselor finds that he was given many long assignments as a freshman and that at the beginning of the school year he decided not to work. The counselor is uncertain that this student's attitudes will improve markedly with counseling. Furthermore, he feels that the

teachers can make suggestions to improve the situation. Accordingly he calls them into a case conference to describe the situation, ask for suggestions from them, and work out with them a plan for helping the student.

In the conference, each teacher offers ideas and suggestions freely. Eventually, a plan is made under which each teacher will confer briefly with the student and suggest that the boy himself must decide how much he will do in addition to the usual class work. He may do nothing beyond the usual work if he so desires. This plan works; the student is soon seeking his various teachers' help in outlining additional projects, not the routine drill-type extra assignments he was given so often in his freshman year.

Had the plan not worked, the counselor would have had a case conference with the student, his parents, and one or two teachers. Many other problems can be handled well by counseling with the student and then having a case conference with people who work with him.

In summary, the case conference is useful when one teacher or counselor cannot work out the problem in counseling interviews with the student; when changes are necessary, as in classroom or cocurricular activities; and when any plan of improvement calls for action by several individuals.

THE TEACHER REFERS STUDENTS FOR SPECIAL ASSISTANCE

Guidance is not provided solely by the classroom teacher or administrator except in small schools. In medium-sized and large schools, several people in the local school or in the school district are available to provide guidance assistance to teachers and students directly. The teacher often refers a student to specialists in connection with appraisal, occupational information and career planning, part-time work or direct financial assistance, counseling, the home situation, and health.

EVALUATION SPECIALISTS

The school counselor, psychometrist, and psychologist are specialists in appraising and diagnosing individual students. Having been educated for this type of work, these specialists can give the teacher valuable assistance in selecting, administering, and interpreting group achievement and other tests. In addition, as was brought out in Chapter 9, vocational in-

terest inventories, individual intelligence tests, group and individual aptitude tests, personality inventories, and other instruments for personality assessment are being widely used. Many teachers do not have the education needed to administer and interpret some of these tests and inventories (Fig. 15.6). Consequently when a student is identified who appears to learn very easily, to be especially good in some expressive area such as voice or dramatics, to have a serious emotional problem, or to be especially slow in learning, the teacher may refer him to the appropriate specialist for appraisal and for suggestions regarding a plan of action.

Fig. 15.6. The Wechsler Intelligence Scale and the Rorschach Personality Test provide valuable clues to understanding the individual student. Specialists are required to administer these tests. (Madison, Wisconsin, Public Schools.)

OCCUPATIONAL INFORMATION AND CAREER PLANNING

If a teacher does not have information about various careers or cannot advise a student well about plans for a career, he refers the student to a counselor or teacher who is responsible for this type of counseling. This holds true for any teacher who is new in the school system or is unable to keep up with occupational information but is responsible for helping students plan in relation to a career.

Students need to learn about various occupations, including qualifications, duties, working conditions, permanence of employment, and opportunities for advancement. Many pamphlets, books, and catalogues containing pertinent information are available for most occupations; the specialist in this field may have arranged for them to be placed in the library. Also important in this connection is occupational information obtained in field trips, in talks given by members of the community, and sound films.

Some students need jobs in order to secure a high-school education (Fig. 15.7). Questions such as the following arise in connection with securing and supervising student employment: (1) What are the state laws regarding age, hours per week, and minimum wages for minors? (2) What are the local policies of both government and school? (3) What are the union regulations concerning jobs? (4) How can the school make certain that students are not being exploited?

Some students who are too young or cannot be employed for other reasons need financial assistance if they are to continue school. The teacher may be the first to notice these students because of their clothing and their lack of money for lunch or books or for the very low club dues. Although no teacher can be expected to make the necessary arrangements for providing work or financial assistance for every such student, teachers in most schools are expected to know the students sufficiently well to identify any for whom lack of funds may be a severe problem and to refer them to the proper person. In the small school, this will be the principal; in medium-sized and larger schools it will be someone on the counseling or administrative staff.

COUNSELING THE SEVERELY DISTURBED AND ANTISOCIAL

In spite of years of education beyond the baccalaureate degree and long experience, psychiatrists have not yet discovered a therapy that in a short time will bring the severely disturbed student back to normal emotional expression and behavior. It is not yet possible to keep every student who has committed one minor offense from continuing to commit such offenses or from getting into more serious difficulties. Obviously the teacher cannot be expected to have the skill required for counseling effectively with all his students. However, every teacher should know when emotional behavior and antisocial acts in the classroom call for referral to the school counselor rather than for punishment. Even though a student exhibits less serious symptoms of emotional disturbance or antisocial conduct, unless the teacher refers him the situation becomes progressively worse until eventually drastic action is necessary. In most cases, it is much easier to deal with the younger and less severely disturbed student than with the older and more disturbed one.
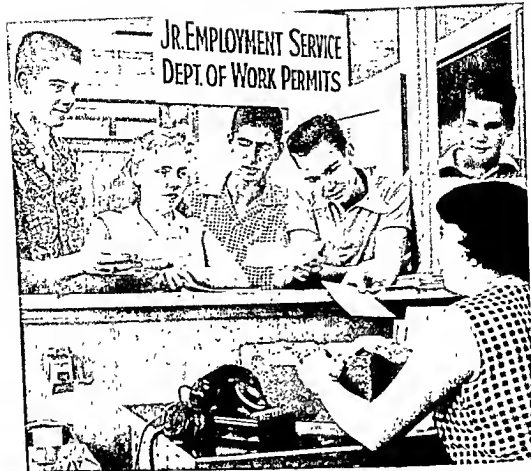
Fig. 15.7. Schools are assuming increasing responsibility for student employment and distributive education; large high schools have specialists to coordinate these activities. (Top, San Diego, California, City Schools Photo; lower, Pittsburgh, Pennsylvania, Public Schools.)

Some teachers hesitate to send an extremely withdrawn or poorly behaved student to a counselor because they feel that this reflects unfavorably upon their own prestige and status. This attitude should be avoided. Recognizing that behavior results from a cause and that many causes of disorderly conduct are to be found outside the classroom, the teacher should try to discover why a student is disorderly and then work out a solution. Where no solution can be found and the behavior becomes progressively worse, he should refer the student to the proper person. When no counselor is available, as in a small school, the teacher must assume more responsibility for locating community agencies and working with them in setting up remedial programs.

SOCIAL WORKERS

Many students are still neglected morally, financially, and emotionally at home. Many homes present closed doors to the teacher and counselor. For students from such homes the school is the last hope; if the school does nothing, no one will.

In connection with a longitudinal research project, the author experienced considerable difficulty in arranging to see some parents. They simply refused to respond to a knock on the door or to answer the doorbell, probably because they wanted to avoid bill collectors and salesmen. Even when he was admitted, it was sometimes impossible to ascertain the student's true father; the mother herself sometimes did not know. Yet, once whoever has charge of the student was convinced that the author was truly interested in helping the youngster, coöperation was usually whole-hearted.

Social workers, more than any other specialists, are skilled in working with parents and with parent substitutes who represent the entire range of coöperativeness—from those who try to keep the student out of school to those who are vitally interested in him. When a student's statements or behavior indicates difficulties at home and the teacher or other school person cannot set up an effective relation with the parents, it is best to refer the case to a skilled social worker. When no social worker is available, an interested physician or nurse, or a representative of a community agency such as the Red Cross or the church may be appealed to. Attendance officials in some schools also function as social workers.

"ESSENTIALS OF A WELL-FITTING SHOE"

Fig. 15 8. Maintaining health and physical fitness is now taking precedence over perfect attendance when the latter means attending school when in poor health or letting physical defects go uncorrected. (Des Moines, Iowa, Public Schools.)

MEDICAL ADVISERS

The school nurse has become an invaluable member of the school staff. She may appraise the students' health, care for the student who is injured or ill, handle home and school relations involving health, and advise girls about personal hygiene and sex as necessary. In most schools with a full-time nurse, she keeps all the health records and also tests vision and hearing and gives other tests of physical fitness. While not trained to make accurate diagnoses, she can handle most health problems which arise in the daily life of ndolescents and is much better qualified than most teachers to decide about referring a student to a physician or other specialist for medical attention.

Unless the school gives systematic physical examinations, teachers are usually the first of the school personnel to note possible poor health and hearing and vision defects. Even when good medical examinations are given annually—not the routine ten-minute variety that is so common—the teacher is still usually the first one to note acute illness, disease symptoms, sensory defects that appear suddenly, and poor general health. Educators are gradually accepting the idea that perfect attendance is not so desirable as caring for one's health by staying home when ill and obtaining needed medical attention from a physician or dentist, even during school hours (Fig. 15.8). The teacher who accepts

this point of view will be especially alert to symptoms of illness and to physical defects and will refer such students immediately to the nurse or other appropriate school person. In the small school, this is often the principal, who may take an ill child home and refer other health matters to the parents for action.

SPECIAL TEACHERS MEET THE NEEDS OF SPECIAL GROUPS

With each succeeding decade, a larger percentage of all students of high-school age continue school until they are eighteen. As a result, an increasing number of students in secondary schools have very low intelligence and show severe deficiencies in language arts and mathematics, serious emotional disturbances, antisocial attitudes, or physical handicaps. The total percentage of students age 12–18 with one or more of these conditions varies from community to community but is generally not less than 5 percent and may be as high as 15 or 20 percent.

Society requires these students to remain in school until age eighteen on the assumption that attending school and living at home are better than being institutionalized. However, unlike elementary schools, many secondary schools have failed to make adequate provisions for such students. They prefer to retard the student, give him failing marks, or let him sit in class doing nothing or misbehaving, rather than providing the essential special classes taught by specially prepared teachers.

PROVIDING FOR THE MENTALLY RETARDED

Many students with IQ's ranging from 55 to 80 and with other characteristics that identify them as extremely slow learners can profit from attending secondary school only if programs suited to their abilities are available. Having one or two extremely slow learners in each of his five English classes makes providing for the more average and gifted students unnecessarily difficult for the teacher. Requiring these retarded students to take three or four of the classes in the ninth or tenth grade that are required for graduation is a poor way of helping them and prevents the teachers of those classes from doing their best with the students who can learn more efficiently.

A junior high school with eight hundred students is likely to have from ten to twenty or more extremely slow learners in the various regular classes unless such students have been identified. These students should

be assigned to a special class taught by a specially prepared teacher. Since they may be good in physical activities, they may take regular classes in physical education, art, shop, home economics, and the like.

PROVIDING FOR THE DEFICIENT IN READING

Students with IQ's ranging from 55 to 80 and with other characteristics of mental retardation are unable to read well. When they are of seventh-grade age, they read at about the second- to fourth-grade level. There are other students with IQ's well above 80 who are retarded in reading by two or more years when they enter the seventh grade and who fall further behind as they go through successive high-school grades.

This situation is widespread in our schools today and it will continue unless more adequate provisions are made. Some junior and senior high schools are now setting up developmental reading programs for such students. Typically, the students whose IQ's range from average to higher but who are seriously retarded in reading are placed in a class for developmental reading; they attend the other regular classes. In some smaller schools, students with reading deficiencies are given developmental reading instruction with students with low IQ's. While this is not the most desirable arrangement, it is better than putting them in regular English classes where they make no progress in reading. In schools with no provisions for those deficient in reading, the teacher who has five sections of tenth-grade English, for example, identifies these students, forms a special small section for them, and has four somewhat larger sections of regular English. He finds this arrangement better for meeting the needs of all the students, even though he may not be particularly competent in teaching basic reading and other language skills which the retarded need.

PROVIDING FOR THE EMOTIONALLY DISTURBED

A few schools are now experimenting with special classes for emotionally disturbed students. Often these students attend a special class for only part of the instructional program, perhaps half a day; for the remainder of the program they attend regular classes. These experimental programs cannot be effective unless the teacher is competent to work with and help these students. Having the same group of students, usually ten to fifteen, for a considerable part of the school day enables the

teacher to know them well and provide better for their needs. The emotionally disturbed student finds more security in this arrangement than when placed in the many different classes characteristic of the departmentalized junior and senior high school.

PROVIDING FOR THE EXTREMELY ANTISOCIAL

The number of young people picked up by the police for delinquency has increased in recent years, though the percentage thus apprehended has not increased. The tendency is for school and court officials to handle cases involving minor offenses so that the student can continue school, though on probation. To provide for these students, some schools are experimenting with special classes in one subject area, often social studies. In such classes the teacher attempts to change the students' antisocial attitudes by accepting them as worth-while individuals; making them responsible for behaving well; letting them give vent to their antisocial feelings in sociodrama, psychodrama, and other forms of role playing; and setting up student government in the class. Since some of the students are also severely disturbed emotionally, individual therapy is arranged for, with the teacher assuming major responsibility for coördinating the entire program, including relations between the student, the court, the psychiatrist or counselor, and the teachers in his other classes.

PROVIDING FOR THE SEVERELY HANDICAPPED PHYSICALLY

Many school systems have special classes for younger children who have severe vision, hearing, or other physical handicaps. But at age 14–16 these students are sent to the regular secondary schools in many communities, where no special provisions are available except as can be made by the classroom teachers. Their being assigned to the regular instructional program is often the result of failing to meet their special needs, rather than of sound judgment that this is best for such students.

As was true of the mentally retarded, the idea of keeping the physically handicapped in their homes and in school, rather than institutionalizing them, is of recent origin. The special instruction that many communities provide at the elementary-school level is expensive; it costs four times as much as that in the regular classes does. Handicapped students can participate in many regular classroom and cocurricular activities, but they definitely need special instruction in certain areas (Fig. 15.9).

When these students are reasonably well provided for, there is less need for sectioning in the regular classes and teachers can devote more time to the average and gifted students.

A SPECIALIST COÖRDINATES THE GUIDANCE PROGRAM

Just as our larger schools have departmental heads who assume the responsibility for overall coördination of instruction in a subject area such as English, so someone is needed to coördinate the overall guidance and counseling program of the school. The following six important areas of guidance have now been discussed: (1) securing and using appraisal information as a means of understanding the student, (2) collecting and distributing occupational information, arranging for part-time employment and organizing the distributive education relations of the school and community, (3) counseling with individual students, (4) planning regular classroom and cocurricular activities with students in relation to their career and leisure-time pursuits, (5) referring students to specialists, and (6) handling relations and procedures with agencies outside the school. Continued research is needed to secure accurate information about dropouts and graduates, and the effectiveness of the various phases of the guidance program.

Coördination of the guidance program varies, depending on the size

Fig. 15.9. Some secondary schools provide special classes for the physically handicapped, as for those with other handicaps, for part or all of their instruction. How does this facilitate the guidance functions of the regular classroom teacher? (Madison, Wisconsin, Public Schools.)

of the school and the personnel who have assumed the various responsibilities. In a small school one counselor with part-time teaching duties may be responsible for coördinating the program. In a large school, such as Broad Ripple High School mentioned earlier, several persons may be responsible for various parts of the overall program, with the school principal assuming responsibility for overall coördination. The more general practice in the large schools, however, is to place overall coördination in the hands of a person who has done his graduate work in guidance and counseling or school psychology, and for him to organize a committee to formulate overall policies in the school.

TEACHERS HELP FORMULATE GUIDANCE POLICIES

If a school has a guidance committee to determine policies for the overall guidance program, why should teachers serve on this committee? There are four good reasons.

1. The budget for the school year is fixed. Employing a special teacher for the slow learners will mean larger classes for the regular teachers because funds are not available to pay a new special teacher. Teachers on the committee may decide in favor of the special teacher, accept the increase in the size of their classes, and work with enthusiasm in the community to gain more support for this program. If teachers have no voice in this policy, they may resent the hiring of the special teacher.

2. A counselor has one regularly scheduled conference with each student every semester. The counseling conferences are scheduled to fit the counselor's rigid time schedule. This means that students may have to miss a class for this conference—or several classes if the students need several conferences. If teachers serve on the counseling committee, it may be possible to prevent this; if not, the teachers will know that such conflicts in time are unavoidable.

3. A principal who has just become interested in the homeroom's potential guidance function assigns thirty to forty students to each homeroom teacher. The teacher learns that he is to be responsible for all homeroom guidance activities, including counseling. But the principal fails to make any provisions for reducing this teacher's five regular classes, the homeroom, and his sponsorship of a cocurricular activity. Teachers need to serve on the guidance committee to prevent such policies as these being formulated.

4. Many teachers refuse to accept any guidance or counseling responsibilities. Such teachers are likely to have many maladjusted and unhappy students and many who fail; generally these teachers violate most mental health and guidance principles in their instruction. Some teachers are uninterested in the students; others are not happy teaching. Since this is a professional problem, teachers on the guidance committee need to assume a reasonable share of responsibility for dealing with their maladjusted, indifferent, or antisocial colleagues.

An approach to guidance such as the one presented in this chapter—that guidance is part of the regular instruction and cocurricular activities, that special help should be available whenever necessary, and that students with special needs should be provided for—makes teachers mainly responsible for the effectiveness of the program. Specialists in guidance and special teachers are available for help with problems that most teachers are unprepared to deal with. However, the overall policies should be formulated by a committee, and this committee should include teachers.

SUMMARY

Secondary education today requires that the teacher act as a counselor to young people. Accordingly, in the regular program of instruction, in cocurricular activities, and in the homeroom and core class the teacher's activities are directed toward understanding the student, working with him individually, working with the class or with smaller groups of students, working with parents, and coöperating with others when a student is not understood well or needs special assistance. The goal is to help students satisfy their developmental needs on a day-to-day basis and to supply special help when necessary—for example, in the area of emotional problems, selection of courses or cocurricular activities, financial problems, and the like. Regular classroom teachers can carry out these guidance responsibilities with most students.

Some students, however, have special problems both as individuals and in groups. The school counselor, social worker, nurse, and those in charge of part-time employment can help students with their individual special problems. Students with very low learning abilities, severe deficiencies in reading or other subject areas, emotional problems, or se-

rious physical handicaps are usually best provided for in special classes taught by special teachers, at least for part of the school day.

A guidance program needs direction, just as the regular program of instruction and cocurricular activities does. It is becoming increasingly the practice for someone who has specialized in guidance or school psychology to assume overall coördination of the guidance program, and for a committee, representing teachers and administrators and sometimes parents and students, to meet with the director to formulate the overall policies.

Questions and Activities

1. How do the teacher's attitudes toward guidance and counseling affect the number and severity of the problems students have in the regular classroom program of instruction?
2. Discuss the strengths and limitations of the short homeroom period in guidance and counseling.
3. What do you believe are the strengths and limitations of the core class in guidance and counseling? Discuss fully.
4. How does the length of the teaching period affect the opportunity to provide for student needs in individual conferences and small-group activities?
5. What are the main guidance emphases in cocurricular activities?
6. Discuss briefly the major attitudes, understandings, and skills that are essential for counseling.
7. How do the time available and the classroom space affect the teacher's role in individual counseling?
8. Under what circumstances would a case conference be helpful to a student?
9. What decisions have you made on which you would have liked help from a specialist?
10. When should a student be referred to a specialist by the classroom teacher?
11. How can special teachers contribute to the effectiveness of a guidance and counseling program? Of classroom instruction?
12. Why do larger schools need someone to be responsible for coördinating the overall guidance program?
13. Why should teachers serve on the guidance committee or council that formulates the guidance policies of the school?
14. Teachers may assume major responsibility for individual counseling, or full-time counselors with no teaching responsibilities may be employed.

On the basis of information secured from reading reports or visiting schools in which one or the other of these two plans prevail, state which plan you favor. Why?

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Organizing and Directing Cocurricular Activities

THE great value offered by extracurricular activities is suggested by the following quotations:

> Extracurricular activities can be defended adequately on the same traditional grounds as curricular ones. . . . But when education is conceived as personality development, school activities find their best support, for they, more than formal classes, are conducive to leading pupils out in ways which make their personality attractive.[1]

> The program [of extracurricular activities] is no longer regarded as *extra*. It probably provides the best experiences in the entire curriculum from the viewpoint of training boys and girls in the techniques of getting along with one another. Many important, interesting lessons of lasting value are learned in the activities.[2]

Although extracurricular activities may not be as valuable for every student as the above would lead one to believe, the fact that many such activities have become regular courses for which credit is given indicates the worth placed on many activities which start as "extra."

The present author prefers the term "cocurricular," for he believes that it suggests importance for these activities equal to that of the regular class program; however, he holds that the school not only can but must achieve most of its objectives through its regular program. The term is also appropriate because many of the clubs and activities in the smaller high schools are in fact credit courses or part of such courses in the larger high schools. The author is convinced that some cocurricular activities are as valuable to the student as are some classes; on the other hand, each student should find several classes that he takes each year as valuable as his cocurricular activities.

Cocurricular activities must be brought into the perspective of the regular class program. In doing this, three principles will be helpful. In discussing the first one, the major types of activities are presented; and in connection with the third one, subprinciples to insure responsible leadership are outlined.

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[1] J. R. Shannon, "School Activities and Personality Development," *School Activities*, May, 1949, p. 275.

[2] Adolph Unruh, "Some Criteria for Evaluating a Program of Activities," *School Activities*, September, 1949, p. 3.

1. Cocurricular activities satisfy some needs of young people.

2. Cocurricular activities promote meaningful learning.

3. Cocurricular activities require responsible leadership.

COCURRICULAR ACTIVITIES SATISFY SOME NEEDS OF YOUNG PEOPLE

The regular program of class work and the student's home and neighborhood activities do not satisfy some of his needs adequately. If students are to learn efficiently in the regular classroom program, the developmental needs listed in Chapter 2 must be met: achieving satisfactory relationships with agemates and more mature relationships with adults, attaining emotional maturity, securing a measure of economic independence, and formulating a relatively stable philosophy of life. The class program is adequate for some students, but not for others. Furthermore, many regular classroom

Fig. 16.1. Current events, motion-picture projection, and foreign-language clubs are three among the many clubs in junior and senior high schools. What may students gain from cocurricular activities that is different from what they obtain in the regular classroom program? (Top, Richmond, Virginia, Public Schools; center, San Diego County, California, Schools; lower, Cleveland, Ohio, Board of Education)

ORGANIZING AND DIRECTING COCURRICULAR ACTIVITIES

teachers give students little **assistance** with the first two needs listed.

The variety of cocurricular activities offered in one high school is shown in Table 16.1. Counting each music and athletic activity separately, the total is 67; some of these, such as intramural sports, have many subgroups. Most of these activities are included in the subsequent discussion. However, this high school also has other cocurricular activities such as teas, dances, banquets, and parties but does not sponsor any social fraternities or sororities; the latter will also be discussed in this chapter.

SUBJECT-AFFILIATED, HOBBY, SERVICE, AND HONOR CLUBS

Some high schools have a club related to every main subject field: algebra, art, business, chemistry, debate, foreign language, history, industrial arts, music, science and so on (Fig. 16.1). These clubs reflect the interests of students and teachers in a certain area of knowledge. They provide a more permissive environment than the regular classroom does. Besides learning subject matter and widening their interests, the students have an opportunity to develop social skills and to establish more mature relationships with adults if the club's activities extend beyond the school environment.

Though many of the students now in high school will work forty hours or less per week as adults, the program of regular instruction, particularly in the smaller schools, gives little or no attention to leisure-time hobbies. In the larger schools hobby clubs are often more popular than the subject-affiliated clubs. Archery, aviation, chess, folk-dancing, garden, knitting, music appreciation, photography, short story, and swimming are some of the many hobby clubs. Under the leadership of interested teachers, some hobby clubs are making good provision for leisure-time pursuits.

Service clubs, known by a variety of names and having a wide range of objectives, attempt to do somewhat the same thing at the adolescent level as community service clubs do at the adult level. One such club that is found in many junior and senior high schools is the Junior Red Cross. Collecting money, clothing, books, and Christmas gifts for needy children, and other humanitarian activities of a similar nature, are the immediate goals of school service clubs. Entertaining hospital patients

TABLE 16.1. Cocurricular Activities in Broad Ripple High School, Indianapolis, Indiana, March, 1957

1. Art Club
2. Booster Club, Cheer Leaders
3. Business Leaders
4. Clef Club
5. Debate Club, Forensic Activities
6. Easter Auditorium
7. Flag Twirling—Majorettes
8. Foreigneers
9. Freshman Aids
10. Freshman-Sophomore Talent Show
11. Future Nurse's Club
12. Historical Society
13. Hi-Y Club
14. Junior Red Cross
15. Key Club
16. Library Club

17. Music Organizations

Boys' Glee Club
Brass Choir
Choir
Clarinet Ensemble
Dance Band
Girls' Concert Choir
Girls' Glee Club

Girls' Ensemble
Golden Singers
Madrigal Singers
Operetta
School Band
School Orchestra
String Ensemble

18. National Honor Society
19. National Thespians
20. Orange Aid Club
21. P.A. Crew
22. Photography Club
23. Quill and Scroll
24. Radio Club
25. Radio Programs
26. Riparian Newspaper
27. Riparian Yearbook
28. Ripples
29. Senior Play
30. Stage Craft
31. Stamp Club
32. Student Council
33. Travel Club
34. Tri-Hi-Y Club
35. Understudies

36. Athletics and Intramurals

Boys' Baseball
    Varsity
    Reserve
    Freshman
Boys' Basketball
    Varsity
    Reserve
    Freshman
Boys' Football
    Varsity
    Reserve
    Freshman
Boys' Golf
Intramural Sports
Track, Cross Country
Tennis
Wrestling

Girls' Archery—Fall and spring
Volleyball
Basketball
Tennis—Fall and spring
Badminton
Tumbling
Softball
Bowling—Both semesters
Square Dance Club—Both semesters

and parents and directing school traffic are also included in their programs.

Honor clubs may be affiliated with subject fields, as in the case of the National Thespian Society, or with high achievement in general as in the National Honor Society. The Future Teachers of America and other organizations based on career interests bring together students with common interests and usually of above-average achievement in one or more subject fields. These honor clubs are open only to students whose achievements and conduct attain specified levels; no student, however, may be denied admission for other reasons.

FRATERNITIES, SORORITIES, AND SECRET SOCIETIES

Remmlein reported in 1947 that 26 of 47 states had state laws banning high-school secret societies; the 48th state, Wisconsin, did not supply sufficient information to assign it to either category.[3] The fact that high-school secret societies are banned by law in many states suggests their undesirability. Are fraternities and sororities secret societies? They are, when admission is determined by vote of the present members, as is true of most social fraternities and sororities. No one who teaches in a state where high-school secret societies are banned by law can be legally required to sponsor or have any connection with such a group.

Regardless of whether the state bans or permits secret societies, the high-school teacher should consider the following factors before he consents to act as an adviser or sponsor for such a group:

1. Any high-school organization that admits new members by vote of its present membership, rather than opening its ranks to any student who is qualified by the school, is inimical to the public good in that it is exclusive, undemocratic, and secretive, and circumvents school control. Furthermore, it is a disruptive, divisive force in the student body.

2. No high-school fraternity or sorority can provide any democratic value better than can school-sponsored, open organizations.

3. To eliminate already existing secret societies, the school should sponsor nonsecret organizations and seek the cooperation of both students and parents in making them successful. Legal means should be the last resort for ridding the school campus of the secret societies.

[3] Madeline Kinter Remmlein, "Can High-School Fraternities Exist Legally," *Bulletin of the National Association of Secondary School Principals,* February, 1947, pp. 55–69.

It may be difficult for beginning teachers who had pleasant experiences in college secret fraternities or sororities to accept this point of view. It is accepted much more easily by teachers who either chose not to join such a society or who were prevented from joining because of socioeconomic status, social qualifications, religion, race, appearance, or other grounds. Also pertinent here is the fact that college sororities and fraternities are for young adults, not adolescents. More-

Fig. 162. What matters are appropriate for the student council to handle? How should representation on the council be decided? (Pittsburgh, Pennsylvania, Public Schools)

over, a college education is elective, not compulsory as is a high-school education. College officials can and do remove undesirable students and groups. The high school cannot so readily remove students who do poorly academically or who might organize a secret society. Furthermore, high-school students who might wish to transfer to another school to get away from a discriminating group usually cannot do so, whereas college students can transfer from one college to another.

SCHOOL GOVERNMENT AND ASSEMBLIES

Desirable citizenship skills and a "we" feeling can be developed in any classroom, but many classrooms give little attention to these matters. When managed intelligently, school government and assemblies, together with athletic, musical, and other events, achieve these goals for most students.

The term student council is generally used for the organization of students that represent various classes, various grade levels, and various major activities. If the student council is to be effective, representatives of the school's administrative, teaching, and guidance staff are also needed. Many needs of youth can be satisfied through a well-organized school government (Fig. 162).

Sometimes the student council or school government fails to satisfy student needs. Especially to be avoided are having the council members serve as a police force, giving them custodian functions, and having the council or representatives therefrom serve as attorney, judge, and jury in cases of student misbehavior. While the school council can assist in these fields, its main function is to handle the needs of its constituents, the student body. Law enforcement and punishment should be a minor function.

ATHLETICS, MUSIC, DRAMATICS, ART, AND SCHOOL PUBLICATIONS

Many who are preparing to teach in high schools and many in-service teachers have participated during high school or college in one or more athletic, music, or artistic activities. Their own experiences enable them to recognize the values and some of the limitations of such activities. Two main issues are related to this area of cocurricular activities.

1. Should these activities be engaged in primarily to promote school-community relations and for audience recreation or to benefit the students? If the latter purpose is foremost, primary attention is given the students, with secondary consideration going to the degree of perfection achieved in interscholastic athletics, music festivals, plays, art exhibits, and school annuals or yearbooks. As finished performances, they may be the culminating activities of fruitful learning experiences, particularly in the senior high school; but they will be scheduled for the most part during regular school hours to encourage widespread student participation rather than audience entertainment. Many of these culminating activities are necessary to promote "we" feelings in the student body and to foster good school-community and parent-teacher relations.

2. Should these activities be open to most students or only to the high achievers? Many students participate in small junior and senior high schools. But in the larger senior high school, the athletic teams, music organizations, and participants in plays, art exhibits, television productions, and school publications represent a small percentage of the total enrollment. It is not uncommon to find only 5 percent out of 3000 students enrolled in Grades 7-12 in the combined activities. From the elementary grades through the senior high school in some school systems at present an attempt is made to identify talented children and continuously, at successive grade levels, to eliminate increasing numbers of the less talented and poorly motivated. Undoubtedly, this competitive-

ness and resulting waste of talent derives in part from real or imaginary pressure from colleges and universities which supposedly want to admit as freshmen only a few of the "stars" from each of many high schools. Much of this pressure is imagined, however, for our colleges and universities provide intramural athletics, clubs, and other activities in which any student with any degree of talent may participate if he desires.

The junior or senior high school that wants its students to win—athletic events, music and dramatic contests, or whatever—and that uses cocurricular activities for this purpose should study its regular class and cocurricular program seriously to make certain that it has done reasonably well in identifying and developing the expressive abilities of all its students (Fig. 16.3). Unequal opportunities for learning at earlier school levels and unequal rates of development in boys and girls suggest, for example, that dropping ninth-graders because at present they rank average to lower in music performance eliminates many with exceedingly good potentialities in the field of music.

SOCIAL ACTIVITIES

Parties, dances, dinners, and the like are important in the life of most adolescents. Such activities, when under good leadership and when their cost is kept low, give many students an opportunity to practice the social amenities which make living more gracious. Because of differences in family customs and environment, many students do not know how to act with each other in social situations, such as dances and parties.

Adolescents need recreation in groups that include both sexes. Many go to dances or parties outside school without any adult supervision. In smaller and medium-sized schools, class parties and dances fill the need for this form of recreation more adequately than do private or commercial parties and dances. A party or dance in the larger school may be given for a club or other organization rather than for a class or the entire student body.

School social events need supervision to about the same extent as a musical festival, athletic field day, or art exhibit. The school person in charge makes certain that all the students can attend if they want to, and that their conduct is reasonably good.

Senior night in one high school in Madison, Wisconsin, is noteworthy as an example of adequate supervision and good attendance. For years,
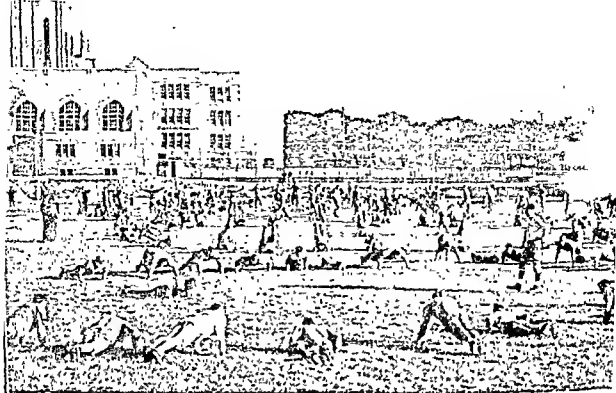
Fig. 16.3. The big-four in cocurricular activities—athletics, music, dramatics, and school publications. How much emphasis should be given to these activities in comparison with regular instruction? (Top left, Madison, Wisconsin, Public Schools; top right, Madison, Wisconsin, Public Schools; lower left, Milwaukee, Wisconsin, Public Schools; lower right, Cincinnati, Ohio, Public Schools.)

the seniors had had parties that lasted all night, with no supervision after the senior dance ended at about midnight. Both parents and the school people found this undesirable, so, working together, they planned an all-night party with supervision. Some of the parents and teachers chaperone during the dance; others prepare refreshments and entertainment *following* the dance. The parents serve "breakfast" to the seniors at the end of the festivities. The dance and the following entertainment are given in a large, private club. The adults stay as long as the seniors want to stay, but no senior may leave the club except to go home. Thus the parents avoid worrying about where their young people are. Furthermore, the party costs the seniors relatively little for the parents and other sources contribute for the dance and refreshments, and the only expense the students bear is the cost of what they wear.

SCHOOL CAMPING

Camping over the week end, during the regular school year, and in summer is rapidly increasing. Often camping arrangements are handled coöperatively by a school district and the unit of local government.

Several needs of adolescents can be provided for in camping, the most important of which are the assumption of greater responsibility for self-direction and the ability to live closely for extended periods with age-mates of the same sex in the absence of parental supervision.

Camping is handled under a variety of plans, depending on the sites available and the attitude of the school and community toward its values. Under one plan each student goes camping for a day or two each month of the school term. Under another plan, groups of students go for a longer period once each year. Under still another, with the camp site near the school, the students go only overnight. Some school camps operate primarily during vacations and the summer months.

The teacher's responsibility in respect to camping varies. In some programs, several teachers assume almost complete responsibility, just as a group of teachers do for an instructional area such as science. In other programs, one person who has taken special training in camp leadership and teaching assumes the major responsibility. Under the twelve-month contract for teachers, which is becoming more prevalent, it is possible that the contract will call for ten months of classroom instruction, one month of camping or other school-connected activity, and one month of

vacation, with provision for further education or travel during a portion of certain years.

Because of the variety of other activities that are possible on a good site with adequate equipment, camping is another "frill" of education that has persisted, is gaining acceptance, and will eventually attain great respectability and prestige. Home economics, business education, and physical education were largely "frills" until 1920; so was science until about 1860. People are increasingly seeking the outdoors, and the idea that people in sedentary occupations, including executives, work more efficiently if they take an occasional break for golf, swimming, tennis, fishing, and similar activities is becoming generally accepted. High-school students, too, probably learn more efficiently in the classroom with an occasional short period at camp.

COCURRICULAR ACTIVITIES PROMOTE MEANINGFUL LEARNING

The first step in making an activity meaningful is to discover the interests and needs of the group. The interested student tries to get meaning from what he does. Being interested, he sets a goal. As he makes daily and longer-range plans and feels he is progressing toward the goal, he reads, listens, explores, practices, studies; in other words, he seeks and finds meaning in his activities.

When cocurricular activities are meaningful, four factors are probably responsible. (1) Only students who are interested participate in a given activity. In some schools, all students in a grade submit their preference for clubs and other school-sponsored activities and, except for the limits set by the size of the groups, each student is given his first choice. (2) From the adolescent's point of view, cocurricular activities satisfy his immediate needs. Students feel a strong need to make a dance a success, to give a good performance at the music festival, to finish building the radio set. (3) The leadership is in terms of the students' interests and needs. The teacher or other leader maintains a good balance between being direct, to get things started, and permissive, to allow the students considerable initiative. (4) Individual differences are recognized. There is no reason to grade students and no need for them to reach a certain achievement level. As long as they behave decently and work coöperatively, they will not fail and hence can continue to experience success. Further, the student gifted in art, music, dramatics, social leadership, or

other areas is not held back lest he get too far ahead of classmates; on the contrary, he is encouraged to go ahead as rapidly as he can.

COCURRICULAR ACTIVITIES REQUIRE RESPONSIBLE LEADERSHIP

The school people in junior and senior high schools should organize only cocurricular activities that meet important needs of young people, promote meaningful learning, and encourage democratic practices. Consequently, responsible leadership of cocurricular activities might well include the following factors:

1. Participation is both encouraged and controlled.
2. Participation is inexpensive and takes place mostly during school hours.
3. Self-direction and group control are encouraged.
4. School-community relations are improved.
5. Sponsorship should be counted as part of the teaching load.

PARTICIPATION IS BOTH ENCOURAGED AND CONTROLLED

The shy, withdrawing child is encouraged to participate in a cocurricular activity, whereas a definite limit on number of activities and amount of time spent in them is necessary for many students. Also, for activities for which certain minimum school-adopted standards are set, only students meeting these standards are eligible; but no student who meets the standards should be excluded.

When such activities as athletics, music organizations, and clubs were considered extracurricular activities, only students who did well in the regular class program were permitted to participate in them; but when they are accepted as cocurricular activities, nearly every student participates. If the shy student who wants to belong to a group, as most adolescents do, cannot find an opportunity in his regular class work, every attempt should be made to find some activity in which he is interested and shows promise. Among others with similar interests he may make friends and learn to interact freely. Moreover, there must be enough cocurricular activities so that every student can participate in at least one. Only the students who are so severely disturbed emotionally or whose conduct is so antisocial as to interfere with the group should be excluded. As was said earlier, these students need special assistance.

How many cocurricular activities should any one student be allowed to enter? It is not at all uncommon in a small high school to find a senior participating in athletics, music, student government, and a hobby club. This is too much. No student can spend fifteen hours a week on athletics, six to ten hours a week in a music organization, several hours in student government meetings, an hour or two for a hobby club, and still have enough time for his class work. The number of activities a student undertakes must be decided on the basis of the time required for each activity, his program of class work, and his interests and abilities (Fig. 16.4). The author is strongly opposed to any cocurricular activity, including athletics and music, that requires more than ten hours of a student's time per week.

Fig. 16.4 Why must the school set some limits on the time students spend in activities such as this? Does your state athletic association or department of public instruction limit the amount of time given to practice? (Des Moines, Iowa, Public Schools.)

PARTICIPATION IS INEXPENSIVE AND TAKES PLACE MOSTLY DURING SCHOOL HOURS

Club dues, initiation fees, banquets and dinners, cost of musical instruments, fees for the yearbook or annual, admission to athletic events, new outfits for dances—such expenses prevent many students from taking part in cocurricular activities. While the cost of books, clothing, food, and the like in many of our high schools is sharply increasing, students should not be expected to carry the entire cost of cocurricular activities, nor should the school provide more funds for them than for regular class work. If a school finds that expense is preventing general

participation, it should examine its cocurricular program to make certain that it is not too elaborate in terms of student needs and the resources of the parents. Formal and semiformal dances may be replaced by informal dances and parties. Interscholastic athletics may give way to intramural sports that do not require admission fees or expensive equipment. Clubs may have no dues, or a nominal ten-cent due each month.

The more expensive events often take place after school hours and away from school. As will be pointed out later in discussing school-community relations, some activities outside school hours are needed to provide opportunities for parents to act as spectators and to participate. However, to make certain that most students can take part, most cocurricular activities should be scheduled to occur during regular school hours.

STUDENT SELF-DIRECTION AND GROUP CONTROL ARE ENCOURAGED

The age at which people become economically independent increases for those preparing for careers via higher education. Medicine, law, teaching, nursing, engineering, and the other professions require lengthy preparation. But jobs in unskilled and semiskilled occupations are available to eighteen-year-olds. In other words, high-school graduates can start working immediately and make a fairly comfortable living. These students who start to work and those who go on to college need practice in self-direction as early as twelve or thirteen, and by their senior year in high school they should be able to assume fairly complete control of themselves and their lives. As was suggested in Chapter 14, a variety of techniques is necessary here, the chief consideration being a careful balance between teacher direction and student initiative. At times the teacher gives the adolescent positive directions and assurance; at other times he allows the youngster to go ahead on his own, even when it means making mistakes and later correcting them.

Group control should also be encouraged in cocurricular activities. As the teacher works with a group, the amount of control he exerts gradually decreases as the group members assume increasing responsibility for planning, initiating, and executing activities. Noncredit cocurricular activities usually give the teacher a better chance to encourage the development of group control than credit classes do. A good program of class instruction should lead to the development of many social

skills, for the cocurricular program cannot be expected to do the entire task.

SCHOOL-COMMUNITY RELATIONS ARE IMPROVED

Student participation comes first in cocurricular activities, and adult recreation and participation second, as in the regular program of instruction. At present, interscholastic athletics, with band and cheerleaders, violates this principle more directly than any other cocurricular activity. In the larger schools, few students participate in athletics and band, as against large crowds of adult rooters. Furthermore, both losing teams and championship teams disrupt school-community relations. The community's attention given athletics deëmphasizes the rest of the cocurricular program as well as the regular class work. Basketball games, in particular, grip the student body and community from the first small-district play-offs to the state championship game four or six weeks later. Interscholastic competition in senior high-school athletics will probably remain keen, but it should not be allowed to increase in the junior high school. If the good school-community relations and the equally important feeling of unity among the student body are to be maintained, school administrators and the teaching staff must continually guard against overemphasis on athletics in the cocurricular program.

In secondary schools in general, closer relations are needed between parents and the school personnel. The PTA groups in the high schools are seldom as strong as in the elementary schools, even in the same city. Cocurricular activities, perhaps better than the regular class program, can lead to coöperative enterprises among the teacher, the parents, and the students (Fig. 16.5).

How can parents participate in these activities? Subject-affiliated, hobby, and service clubs can call on parents as resource persons and as assistants to the sponsor and student officers. Members of honor clubs can prepare presentations for their parents. Interested parents should be asked for their opinions in school government. The lawyer, union leader, business executive, and homemaker can present specialized viewpoints. Instead of a few students participating in athletics, music, dramatics, or arts, less elaborate but carefully planned and more frequent presenta-tions, in which most students take part, should be prepared for the parents.

Fig. 16.5. Widespread participation by students, with their parents as observers and participants, is the key to achieving good school-community relations through cocurricular activities. (Top, San Francisco, California, Public Schools; lower, San Diego County, California, Schools.)
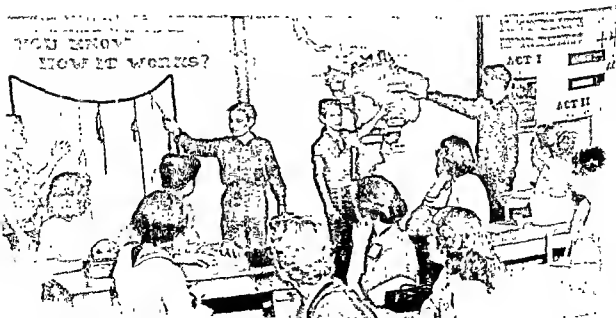
Though cocurricular activities are no longer regarded as extracurricular for the students, they often mean extra work for the sponsor. Only the regular course offerings are usually mentioned when interviewing a prospective teacher; after the school term begins, the new teacher is told which club or other activity he will sponsor. Cocurricular activity sponsorship, however, requires time and effort (Fig. 16.6).

What does the sponsor do? Suppose a hobby club is to meet for one class period each week and that the members are to meet informally for another two hours during or after school. The club sponsor brings the members together for a first meeting and, with his help if needed, they elect temporary officers. If they need information, he outlines some possible objectives and helps the officers and members conduct meetings. With this accomplished, a tentative program of activities for

Fig. 16.6. How much time must the sponsor give to this home economics club to make it function properly? What are the main responsibilities? (Monona Grove, Wisconsin, High School.)

a specified period is planned. Usually the officers need the sponsor's help outside regular hours for discussing various problems. The sponsor attends each meeting of the club; he stays in the background unless he is needed to maintain order, help in planning activities, and answer questions about the proposed activities. If money is collected at the meetings and no school person is responsible for the amount collected, the sponsor helps the treasurer to keep accurate records. The sponsor of a club that meets regularly one period per week will spend at least two to four hours each week meeting with individual students, small groups, and parents, and making plans or gathering information for the regular meetings. Students, especially in junior high school, must be taught many activities because their skills are often inadequate.

How much sponsoring a club should count in the teacher's work load, whether doing so for a full year should be equivalent to offering a regular class for a semester, cannot be answered definitely. Many schools cannot decide whether teaching three groups of twenty-five students for two multiple periods (a total of six periods) is equivalent to teaching five groups of thirty students for five periods. However, in spite of the existing disagreement about teaching load, a school that has so many clubs and other cocurricular activities that adequate sponsorship is impossible should seriously consider incorporating some of them in the appropriate regular classes. Any school that wants a well-organized, well-directed cocurricular program must give the sponsors appropriate recognition.

SUMMARY

Cocurricular activities satisfy some students' needs more adequately than the regular program of instruction. Subject-affiliated, hobby, and service clubs often give students more opportunity for self-direction and group planning than regular classes do. Similarly, school government and assemblies, and the various athletic, music, dramatic, and art activities typically permit more creative expression than classes do. In addition, cocurricular activities provide well for the students' need to achieve emotional maturity, a system of values, and satisfying relations with agemates and adults. High-school secret societies have repeatedly been found undesirable, but camping, social activities, and other similar activities are proving of real value to students in connection with wholesome recreation.

For cocurricular activities to be worth while, the learning thus acquired by the student must be meaningful, and the teacher must accept his full responsibility both as a director of learning and as a counselor and guide. The responsible leadership thus called for rests on these principles: Student participation is encouraged and controlled, activities are inexpensive and occur mostly during school hours, student self-direction and group control are encouraged, school-community relations are improved, and sponsorship counts as part of the teaching load.

Questions and Activities

1. Current criticisms of the secondary school include the statement that cocurricular activities are more important to students than the regular classroom program. To some extent this criticism is justified. What has happened to the regular program that students are led to regard the cocurricular program as more important?

2. Under what circumstances might cocurricular activities contribute more to the personality development of students than the regular instructional program?

3. Discuss circumstances in which it might be more effective to incorporate subject-affiliated and hobby clubs in the regular program of classes rather than considering them as cocurricular activities. Under what circumstances might it be better to continue them as cocurricular activities?

4. "No democratic value can be achieved through secret societies or social fraternities and sororities that cannot be achieved more effectively through non-secret, school-sponsored organizations in the high school." Discuss briefly.

5. List values to be derived through school government, including the student council, and also list some practices in connection with it that should be avoided.

6. Which student needs can be met well by means of athletics, music, art, dramatics, and school publications? How should these cocurricular activities be handled if they are to meet student needs effectively?

7. What values might accrue if each student went to a school camp for about one month every year? Should camping be available to each student in one longer period or in several shorter periods?

8. List and discuss briefly the major conditions which must be present if cocurricular activities are to promote meaningful learning.

9. Five principles were stated in connection with responsible leadership of cocurricular activities. On the basis of your experiences, cite good and poor examples of applying each principle.

10. Attend a school club for several consecutive meetings. On the basis of your observations, describe briefly the sponsor's major responsibilities in making the club successful for the students.

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Reporting Pupil Progress

MRS. JONES inspects the beef at the self-service counter of the grocery store. She examines it and thinks: Boneless roast beef, 'Choice,' 99¢ a pound. Can't afford to spend that much today. . . . There's another roast. Label says 'Good,' 81¢ a pound. Still too much. . . . Ah, here it is. 'Commercial,' 60¢ a pound. I'll take this three-pound package. . . . And here are some bones for the dog.

"Mrs. Jones shops carefully. Sometimes she buys the choice grade; at other times the good or the commercial. Grading of meat is a real help to her. She examines the grades on canned foods and other products; this is helpful, too.

"The Jones children, Mary and Bill, are in the eleventh and ninth grades of school, respectively. Mrs. Jones loves Mary and Bill. Her hopes for each are high. She wants them to behave well, to learn well, and to be good citizens. She feels that Mary and Bill are 'choice' children, certainly not 'good,' 'commercial,' or even a lower grade.

"Mrs. Jones, new to this community and school, has just received report cards which she examines more carefully than her meat purchases. But she is not sure how to interpret the grades on the report cards. She thinks: What do they mean? Mary had a C in U.S. history. Does that mean she is 'good' or 'commercial grade'?

"And Bill had an F in English. I know he doesn't like English, but he did try. I helped him as best I could. I wonder, did Bill really fail? . . . No doubt about it, Bill thinks he did and wants to quit school. I wonder how Miss Blytt, the English teacher feels about him . . .

"Perhaps Mrs. Jones' predicament is more acute than that of many parents. Some schools help parents interpret grades and report cards more accurately. But grading on a comparative basis in subject achievement only is still widely used, and in some instances the letter grades in the various subjects are the main entries on the report card. The report card in turn is the principal informational link between the teacher and parent, the school and community." [1]

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[1] See Herbert J. Klausmeier, "Grading, Reporting, and Public Relations," *The High School Journal*, January, 1957, pp. 146–151, for a more complete discussion of this aspect of grading.

Much progress remains to be made in reporting high-school students' progress to their parents. Most high schools are many years behind the elementary school in this respect. In part, this is due to high-school teachers' having many more students than elementary-school teachers do; in part, it is due to parents' being less interested in adolescents' school progress; but mostly it is due to the emphasis given grades at a time when secondary education was not compulsory and was mainly focused on preparing students for college. In no area of life outside is there an attempt to grade people on a five- or six-point scale. In most areas of adult life, the interest is in a person's progress in his job, and also in helping him and others make reliable judgments as to how effective he is in comparison with others.

A good school reporting system has the following characteristics:

1. Progress in learning is of primary importance.
2. Comparative achievement is also important.
3. Progress toward many important objectives is included.
4. The reporting system is understood.
5. Pupil-teacher and home-school relations are improved.
6. Parent-teacher conferences are used.

These characteristics mean that progress, not grades, is emphasized and that a well-organized reporting system includes written reports to parents, individual conferences with parents, informal student reports to their parents on their progress, and visits by parents to observe directly how the students are progressing.

PROGRESS IN LEARNING IS OF PRIMARY IMPORTANCE

Suppose that in her English class, Miss Blytt had accepted as her main task helping each student make progress in speaking, listening, reading, spelling, and written composition. She evaluated Bill Jones' standing in these areas early in the semester and found him to be especially poor in reading, spelling, and composition. But Miss Blytt organized activities to help Bill and the other students make progress. And Bill learned to spell, to punctuate, and to capitalize more correctly; to use the dictionary in connection with reading, writing, and spelling; and to speak with greater ease and clarity. Toward the end of the reporting period, Miss Blytt's best estimate of Bill's progress was:

Speaking: Excellent progress with usual teacher help.
Listening: Average progress with usual teacher help.
Reading: Slow progress with much teacher help.
Spelling: Slow progress with much teacher help.
Composition: Needs additional help.

From the papers Miss Blytt handed back to Bill, the discussions which followed panel and individual reports, the short quizzes on paragraph meaning, and other evaluation procedures of the type outlined in Chapter 9, Bill himself learned where he was making good progress and where he needed to improve. His knowledge of his progress, feelings of success, and Miss Blytt's sincere interest encouraged him to continue trying.

Had Miss Blytt been permitted to report Bill's progress in the five areas in English, much confusion would have been avoided. Instead of being a failure and wanting to quit school, Bill would have been to stay in school and to profit from her helpful guidance. The relationship would be pleasant, not strained.

A traditional but widely used report card is shown in Figs. 17.1 and 17.2. On this card the student is given a grade in each subject; a check mark in the effort column indicates the teacher's concern with his progress. The reverse of the card (Fig. 17.2) contains the information given to the parents, and the grading system. Student progress is not reported. It is this simple but inefficient reporting which leads to the fairly widespread practice wherein the teacher makes no attempt to determine his students' progress. If teachers were required to estimate the amount of progress and to report it to parents, there would be a more consistent attempt to help each student make progress in school learning.

As yet, only a small number of junior and senior high schools are seriously attempting to appraise and report student progress toward the important objectives of the school. The majority continue to report comparative achievements in single letter grades (Fig. 17.3). Many teachers have only a vague notion of any student's progress in reading, for example, from the seventh to the twelfth grade.

COMPARATIVE ACHIEVEMENT IS ALSO IMPORTANT

By the time a student is a senior, he and his parents should know his strengths and weaknesses quite clearly. A career cannot be planned wisely without this information. Hence the reporting system should con-

WEST SENIOR HIGH SCHOOL

Home Room Number............

Report Card Giving Teachers' Estimate of the Accomplishment

of.. for the semester ending..................., 19.......

SUBJECTS	Effort	Grade Period 1	Effort	Grade Period 2	Effort	Grade Period 3	Final Exam. Grade	Final Sem. Grade	TEACHER
1.									
2.									
3.									
4.									
5.									
6.									
Absence									

A check (✓) in the Effort column indicates the teachers' concern relative to this area.

H. R. Teacher...............

Fig. 17.1. A traditional report card (front).

To Parents:

After you have examined the record on this card, please sign and return to the home room teacher promptly.

You are cordially invited to visit high school classes.

Principal

GRADING SYSTEM

"A"	. . .	93-100
"B"	. . .	85- 92
"C"	. . .	77- 84
"D"	. . .	70- 86

"F"—Indicates a quality of work so poor that the pupil cannot receive credit.

"Con"—Shows that a required piece of work has been neglected without good reason.

"Inc"—Shows that work is incomplete but through no fault of the pupil but rather because of absence or illness.

PARENT SIGNATURE

1st Period ———————————————

2nd Period ———————————————

3rd Period ———————————————

Fig. 17.2. A traditional report card (reverse).

tain the means of informing parents how the student compares with others in the various subject areas, as well as in other important areas of school learning.

This attempt is made in the elementary schools of Madison, Wisconsin (Fig. 17.4). Besides reporting on eight aspects of citizenship and six of work habits, the teacher checks each subject area according to whether the pupil is above grade level, at grade level, or below grade level. His effort is also checked. This reporting system, together with parent conferences, works well in helping pupils and their parents determine progress and also in indicating how one pupil compares with the others in achievement.

A committee of principals and teachers in the Madison schools worked out a guide in attempting to achieve a consistent report of a pupil's comparative achievement. Part of this guide follows:

A. Grade level, as far as practical, should be based on nation-wide standards of achievement for the grade so that the report card has meaning in other schools of the city, state, and nation.

As an aid in arriving at these standards, the following suggestions are proposed:

I. Standardized Tests Where Available: Children normally progress through the six elementary grades in six years. Hence it follows that "At Grade Level" at any particular time should fall within a one-year range—half year above and half year below his grade. . . . [The guide shows the use of city-wide test results in appraising the level of achievement in reading.]

II. Basic texts, especially in spelling and arithmetic, form the basis for grade level placement where achievement tests are not used; that is,

Good citizenship and good work habits are necessary for satisfactory school progress.

The items checked suggest ways in which your child can and should improve:

CITIZENSHIP	Report Periods 1 2 3 4	WORK HABITS	Report Periods 1 2 3 4
Being self reliant		Working carefully and accurately	
Working well with others		Getting to work promptly	
Playing well with others		Completing work promptly	
Observing rules of safety		Using spare time to advantage	
Practicing good health habits		Listening to and following directions	
Showing regard for property		Sharing in group planning	
Respecting rightful authority			
Showing courtesy to others		A conference with parent is desired (Call school for an appointment)	

SCHOOL SUBJECTS

✓—Indicates how your child compares with other children of this grade level   X—Losing position (little or no progress)

Effort: S—Satisfactory, U—Unsatisfactory, I—Improving

| | 1st Report Period | | | | | 2nd Report Period | | | | | 3rd Report Period | | | | | 4th Report Period | | | | |
	Above Grade Level	At Grade Level	Below Grade Level	Effort S I U		Above Grade Level	At Grade Level	Below Grade Level	Effort S I U		Above Grade Level	At Grade Level	Below Grade Level	Effort S I U		Above Grade Level	At Grade Level	Below Grade Level	Effort S I U	
Reading																				
Language																				
Spelling																				
Writing																				
Social Studies																				
Science																				
Arithmetic																				
Music																				
Art																				
Physical Education																				
Attendance	Days Present	Days Absent	Times Tardy			Days Present	Days Absent	Times Tardy			Days Present	Days Absent	Times Tardy			Days Present	Days Absent	Times Tardy		
																TOTALS FOR THE YEAR				
Parent's Signature																				

Fig 17.4. A recently developed report form for Grades 1-6 in the Madison, Wisconsin, Public Schools. The pupil's achievement in each subject field is checked as being above, at, or below grade level; no letter grades are used.

where a child achieves reasonably well in the adopted text and at a normal rate, he is probably doing grade level work. If he finds it difficult to keep up, he is probably below grade level, etc. In the content subjects, such as science and social studies, care will be required to distinguish between *ease in reading the material* and *understanding the concepts involved*.

III. It may be helpful, especially in some special subjects, to skim off the outstanding pupils for "Above Grade Level," then pick out the very retarded for "Below Grade Level" and leave the rest "At Grade Level."

IV. First Grade Problem—For a *normal* class group, the three reading sections approximate the grade levels. That is, the middle group becomes "At Grade Level," the top group, "Above Grade Level," and the low group, "Below Grade Level." Where a class group is known to be above the average, more children will fall in the "Above Grade Level"

column, etc. (The use of reading sections in this way can probably be justified since they have been formed through use of intelligence tests, reading readiness tests, a pupil inventory, and the teacher's judgment.) The same reasoning applies in grades two and three, but will be modified more by other data.

    V. All of the above must be tempered with the teacher's judgment which is based on children's daily work, informal tests, discussion, etc.

B. Attempt to give an honest report to parents so there is no question as to where the child stands.

C. Give credit for effort at all levels of achievement. (A child may be "below grade level" but "satisfactory" in effort.)

This system gets away from the single letter grade and also from D and F, the lowest grades. In addition, parents and teachers can attach more meaning to "above," "below," and "at" grade levels than to the letter grades.

To illustrate how comparative achievements of high-school students might be reported, let us assume that Miss Blytt knew that Bill had an IQ of 90 and a grade placement of 7.0 in reading at the beginning of the ninth grade. At the end of the first reporting period, she estimated that he was in the lowest third of the class in reading, spelling, and composition; in the middle third in listening; and in the highest third in oral expression. This was her best estimate, but it was tentative, for she realized that by the end of the semester his position might change in one or more of the five areas. Instead of giving Bill an F because he was very low in comparison with other students, she might have indicated her estimates at the end of the first reporting period as follows:

Speaking: In the highest third of the class.
Listening: In the middle third of the class.
Reading: In the lowest third of the class.
Spelling: In the lowest third of the class.
Composition: In the lowest third of the class.

Although Bill might find it difficult to accept himself as being in the lowest third of the class in the three areas, it would be better for him than being given an F in spite of his efforts.

Other teachers might estimate comparative achievement in terms of fourths; still others might make their comparisons, not in terms of a single class, but in relation to all the classes they have had in English or all the classes taking ninth-grade English in the school, city, or state. This

means that each teacher must know how a particular class compares with the larger group. In high schools with sectioning, where achievement closely follows the sectioning pattern, students in the high sections would probably be reported as being in the top third, those in the low sections in the lowest third, and those in the middle group in the middle third. Those in the top section would not be given A's and B's, nor would any in the low section get D's or F's.

When it is desired to continue using single letter grades, either of the following systems will make such grades meaningful.

Based upon Thirds	Based upon Fourths
A: The highest third	A: The highest fourth
B: The middle third	B: The second highest fourth
C: The lowest third	C: The second lowest fourth
	D: The lowest fourth

This rating in terms of thirds or fourths is more meaningful to student, teacher, and parents than the present single letter grade which supposedly can be used for subjects in which no tests are given as well as for those in which tests are given. In the above system, F's would be given only to students who could achieve well but who do not, in spite of the teacher's best efforts. The seriously retarded, as proposed in Chapter 15, would take some of their work in special classes.

Finally, the above system is valuable to employers and to institutions of higher learning. Numerical values are assigned to the ratings to secure a composite cumulative record, including each student's comparative standing in his class at the end of his senior year. This can be done as readily as letter grades can be weighted.

PROGRESS TOWARD MANY IMPORTANT OBJECTIVES IS INCLUDED

We saw that the report card in Fig. 15.1 showed only letter grades in subjects, and check marks when the teacher was concerned about a student's effort. Although the school using this report card has other objectives, progress toward achieving them is not shown. This necessarily leads to low grades for students who through no fault of their own cannot do as well in the regular subjects as the more able students.

Fig. 17.5 shows how English-social studies is reported and Fig. 17.6 shows the homemaking reporting system in the junior high schools of

Battle Creek, Michigan. In the English-social studies core class an academic grade is given, based mostly on how the student does in comparison with others as far as subject-matter acquisition is concerned. Progress toward twelve objectives that are considered important is also reported. In homemaking an academic grade is given and progress toward eleven objectives is shown. If you compare these twenty-three objectives with the goals of secondary education listed in Chapter 1, you will find that most are included.

The Battle Creek reporting system is also of value to parents of students who are going to college and of those who are not. The academic grades of students who intend to go to college will probably be quite high. In English-social studies, it is important for the parents to know their children's rating in getting along with others, in work and study habits, and in the other objectives in the English-social studies report. For the parents of students who are not going to college, progressing toward these objectives is crucial, because they are closely related to making a living and being a good citizen. In homemaking, for example, courtesy, following directions, work habits, care of equipment, coöperation with others, and completing projects are as important in secondary schooling as is written work which indicates knowledge of subject matter.

Resistance to the comprehensive report in each subject field, as exemplified by the Battle Creek system, is encountered when teachers feel that they cannot reliably estimate a student's progress in so many different areas. Here again, this is due to teachers' having so many students that they do not know them well, much less being able to help each student make progress and evaluate it. When schools abandon the single letter report, the teachers would do well to discuss the main objectives and also to decide how many they can appraise reliably (Fig. 17.7). Some schools might have fewer objectives in each subject. It is better to group objectives so there will be a smaller number and the appraisals will be more reliable than to break them down into minute ones and guess at the appraisal. Furthermore, as will be brought out in the last section of this chapter, if teachers are to make written reports and also to report in parent-teacher conferences, the time and work involved must be considered. When this is done, part of the class period is used for evaluating progress, instead of the entire period being devoted to imparting information.

Fig. 17.7. Progress toward several important objectives should be appraised, for example, in science and social studies. When and how should this progress be reported to the students? To the parents? (Left, Atlanta, Georgia, Public Schools; right, Madison, Wisconsin, Public Schools.)

THE REPORTING SYSTEM IS UNDERSTOOD

The marks, ratings, and comments in a written report must convey the meaning intended. Thus, in giving an A, B, C, D, or F in the report card in Fig. 17.1, the teacher giving it, the student receiving it, and the parent who sees the report must attach the same meaning to the grade. The earlier discussion of this report card suggested that this is not the case. As proposed earlier, if single letters must be used, an A for the students in the top fourth, B for those in the next fourth, and a D for those in the lowest fourth will have the same meaning to everyone. Thus many misinterpretations and variations in meaning of the present single letter grades can be eliminated. But if this system is used, progress toward objectives must be reported in a meaningful way, because if only comparative achievements are covered, the credit teachers typically give for effort, coöperativeness, study habits, and other qualities when assigning the single letter grade will be lost.

Ratings of satisfactory, improving, and unsatisfactory in areas such as effort, courtesy, and care of materials can be understood by everyone. Although they are commonly used, the author prefers the ratings suggested earlier in this chapter—excellent progress with usual teacher help, average progress with usual teacher help, slow progress with much teacher help, and needs additional help. When the teacher checks one of these on the

report form, both parents and students understand exactly what is meant. The "needs additional help" is used only when the student is referred to someone else in the school, such as a counselor, or to his parents, if they can be of assistance. The inclusion of "with teacher help" in each rating conveys the idea that the student is not being allowed to drift, that the teacher is there helping him.

The Battle Creek system (Figs. 17.5 and 17.6), like many other systems, provides space for comments in addition to the academic marks and the progress ratings. In ceasing to rely completely on grades, many schools attempted to include more teacher comments in their reports. These comments were often as poorly understood and led to as many misunderstandings as the single letter grades. Frequently used but ineffective comments included: "Can and should do much better," "Poor work methods," "Too talkative," "Immature in conduct," "Cheats," "Lies." Such comments on a report give better clues as to how a teacher conducts his class and reacts to students than to student progress or comparative achievement.

PUPIL-TEACHER AND HOME-SCHOOL RELATIONS ARE IMPROVED

The report form shown in Figs. 17.8 and 17.9 is excellent. The Monona Grove High School was built recently. The principal and teachers met with the parents and set up the reporting system, including the form shown. The form incorporates all the features desirable in a written reporting system, except that the letter grades would carry more meaning if A indicated the upper third or fourth of the class.

The parent receives a report for each subject in which the student is enrolled in this school. A letter grade of A to F is given in each of the three main areas: "Individual Performance," "School Citizenship," and "Knowledge and Skills in Subject." These three areas are given equal weight in assigning the grade for "Total Growth and Performance." The various marks—plus, minus, and No—are entered as appropriate in twelve subareas: "Works up to ability," "Has a positive attitude," "Shows self-direction," etc. Space is provided on the back (Fig. 17.9) for parent and teacher comments, and the parent is asked to telephone the school if a conference is desired.

This reporting system includes comparative achievement and progress toward several important objectives, and is easy to understand. Al-

REPORT TO STUDENTS AND PARENTS

MONONA GROVE HIGH SCHOOL
MADISON, WISCONSIN

Fr. ☐   Jr. ☐

Name .... So. ☐   Sr. ☐

                            Mr.

Subject .... Teacher Mrs. ....

                            Miss

Term beginning September 10, 1956—ending June 12, 1957

GRADING SYSTEM

A=Excellent	D=Poor	+ Mark indicates very satisfactory progress
B=Good	F=Failure	No Mark indicates reasonable progress
C=Average	Inc=Incomplete	— Mark indicates need for improvement

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Final Grade
INDIVIDUAL PERFORMANCE					
Works up to ability					
Has a positive attitude					
Shows self-direction					
Plans work wisely					
SCHOOL CITIZENSHIP					
Cooperates with group					
Respects the rights and feelings of others					
Contributes his share					
Is a good leader or follower					
Takes care of school and personal property					
KNOWLEDGE AND SKILLS IN SUBJECT					
Develops skills					
Completes assignments					
Scores satisfactorily on tests and exams					
TOTAL GROWTH AND PERFORMANCE					
Days Absent					
Times Tardy					

OVER

Fig. 17.8. Report form of Monona Grove, Wisconsin, High School (front).

TO PARENTS—

We share with you a mutual interest in helping your son or daughter become a well adjusted and socially competent person. We encourage your understanding and ask for your cooperation.

THE FACULTY
Monona Grove High School!

DATE	PARENT OR TEACHER COMMENTS

SIGNATURE OF PARENT OR GUARDIAN

FIRST QUARTER ———————————————————— □

SECOND QUARTER ———————————————————— □

THIRD QUARTER ————————————————————
    If a conference with the teacher is desired, please check space above or telephone CH 4-6268

Fig. 17.9. Report form of Monona Grove, Wisconsin, High School (reverse). The forms used in this school are among the best in the United States.

though it has not been formally evaluated, the principal and teachers feel that it is producing desirable teacher-student and home-school relations. The highest achievers in knowledge and skills can receive A's in the other two areas; the lowest achievers can receive A to D on each of these two areas. Few students receive an F for total growth and performance; none do who study and behave well.

Everyone concerned also receives a written statement of what each grade means in each of the three main areas. The following interpretation of these grades applies to "Knowledge and Skills in Subject":

A. *Excellent* knowledge of the subject matter; extensive work in the course, all of exceedingly high quality; unusual ingenuity or initiative in applying knowledge to new situations or problems; evidence of unusual responsibility in meeting his obligations to others and in analyzing his strengths and improving the weaknesses in himself and his work.

B. *Good* knowledge of the subject matter, substantially better than average; does work beyond the minimum accepted for credit, most of which is very good in quality; successful in applying knowledge to new situations or problems; usually responsible in meeting obligations to others and in analyzing strengths and correcting weaknesses in himself and his work.

C. *Fair* knowledge of essential subject matter; does some work beyond minimum accepted for credit, most of which is good in quality; with some guidance and suggestions is successful in applying knowledge to new situations or problems; fair responsibility in accepting obligations to others and in meeting them.

D. Meager knowledge of essential subject matter; does a minimum of required work, most of which is *poor* quality; low achievement; usually unable to apply knowledge to new situations; little responsibility in accepting obligations to others.

F. Has not succeeded in meeting even the minimum requirements in a course; no inclination to accept responsibility for himself or meet his obligations to others.

Inc. An *incomplete* is used at any marking period to indicate that the student has not completed required work. It is not a grade in the subject. At the end of the school year it is used *only* in cases in which circumstances beyond the student's control, such as illness, have made it impossible for the student to meet requirements. An incomplete will be marked as a failure automatically unless the time is extended by the teachers involved and the office is notified of such a change.

That this system does produce good home-school relationships is due partly to its adequacy and comprehensiveness, but even more to the atti-

Each of these three areas is of equal weight and is averaged to determine the *total performance and growth* grade. These grades are recorded in the permanent record file and are the basis for job and college recommendations. The subject knowledge grade record is available to employers, college registrars, etc., who might require such records in addition to the total performance and growth grades. School experiences are composed of more than subject matter alone, and the total grade reflects this recognition of other areas of growth.

The three separate areas are briefly itemized to identify any specific points needing improvement or for recognition of unusual achievement. Please understand that the check list is used only where specific items are in special need of improvement or to show commendable performance; satisfactory progress would therefore be represented by no checks appearing in the column.

We encourage you to write or call the school if you have any questions or suggestions. The faculty is always ready to help the school better meet the needs of its youth . . . your children.

Sincerely yours,

The Faculty

MONONA GROVE HIGH SCHOOL

PARENT-TEACHER CONFERENCES ARE USED

Having one conference with each student's parents twice a year is difficult for the teacher who has 180 students. Similarly, parents who had one or two conferences each year with each of their children's four teachers might not be able to spare the time. These facts and the precedent against conferences have led many schools to not require such conferences. In some schools, however, a teacher is responsible for holding conferences with the parents of the thirty students in his homeroom or core class.

Concerning the value of working closely with parents, Lyons states:

"In today's schools constant interaction between the parent and the school personnel is accepted and encouraged. The closer the positive relationship, the better the joint understanding, the more smoothly will the school function. Community opinion soars and public relations improve." [2] She also suggests several ways of working with parents: holding interviews to discuss specific problems or to make regular reports; meeting parents of new students, asking the parent to act as a resource person in the school, and searching for parents who can help in some activity

[2] Aleta J. Lyons, "Working with Parents—How Do You Do It," *The High School Journal,* January, 1957, p. 162.

Fig. 17.10. Teacher-parent conferences achieve the best results when they are based on the feeling that teachers and parents are partners in educating children. (Hillsborough County, Florida, Public Schools)

outside school. In reporting progress, teachers can make this much more meaningful in a conference with parents than in written reports.

The following discussion of attitudes and administrative policies regarding parent-teacher conferences, and conference procedures themselves, assumes that though such conferences are held primarily to report progress, they also cover all the other topics suggested by Lyons.

ATTITUDES TOWARD THE CONFERENCE

Parents and teachers are partners in educating children; hence each must assume a reasonable share of the responsibilities and privileges. A student is at home for several years before he goes to school, when he goes to school he spends 30 of the 168 hours in each week in school, and he attends school about 40 weeks each year. The home influences his conduct, beliefs, attitudes toward right and wrong work methods, interest in school. Many parents want the teacher's help in these areas and they are willing to cooperate actively with the teacher so that home and school may complement each other. Parent-teacher conferences are based on this complementing idea (Fig. 17.10).

Fig. 17.10. Teacher-parent conferences achieve the best results when they are based on the feeling that teachers and parents are partners in educating children. (Hillsborough County, Florida, Public Schools)

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Parents are as individual as teachers are. Differences among them in educational background, socioeconomic status, religious belief, race, and attitudes toward the school should be accepted by the teacher just as he hopes to be accepted by the parents. Many parents, including some who are in business and the professions, do not have the specialized education that enables them to understand readily current educational practices and problems, and many do not understand the terms used in school —core, homeroom, standardized tests, intelligence quotient, emotional disturbance, sociometric tests, homogeneous grouping, differential assignments, and the like. They turn to the teacher for help with such matters. Hence in working with parents, the teacher must accept them without criticism and help them understand his work with the student. Parent-teacher conferences are based on mutual acceptance.

Some parents feel ill-at-ease in a parent-teacher conference because they do not understand the school's program, or they have unpleasant memories of some of their own teachers, or they feel they are not bringing their children up well, or the teacher seems rushed or unfriendly. In parent-teacher conferences, the teacher is most responsible for creating a favorable emotional tone for the meeting. A teacher who looks for good points in parents always finds some. This discovery of strong points, rather than weaknesses, does much to help the teacher establish a feeling of understanding and friendliness.

Some problems, as was pointed out in Chapter 15, cannot be solved in a parent-teacher conference. Therefore, when necessary, the teacher should call upon resource people in the school—the principal, the counselor, the person in charge of employment, the nurse, the librarian, the social worker. Referral procedures were described earlier.

CONFERENCE PROCEDURES

Scheduling the Conference

In scheduling conferences, the following plan has been found practical. However, others may be devised as required by circumstances in a particular school.

All the parents—or at least those who are interested—come to the school before the term opens or soon thereafter for a group meeting with the teacher or principal in which they discuss the number of individual

conferences to be held, the time and place, and the subjects to be discussed. Procedures are also set up to enable the parents to request conferences. A week or two before each conference the parents are notified orally or in writing of the forthcoming meeting.

Preparing for the Conference

The first step in preparing for an individual conference is to invite parents to attend. This may be done by telephone or a visit to their home, or in writing. The following form has been found satisfactory for a written invitation:

CONFERENCE APPOINTMENT BLANK

Dear ....: Could you come for a
conference on (date) .... (time) ....
(place) ....?
If this hour and date are not convenient for you, please indicate a convenient time.
Date .... Time ....
The purpose of this conference is to ....
(Signed) ....

This is an invitation, not a demand. Except in unusual cases, attendance at conferences should not be demanded; instead, parents should learn to realize the value of taking time for them.

Special arrangements are usually necessary for mothers who work, for parents with several children in school, for parents who also have very young children, and for those who are new to the community. Special arrangements may also be required for disinterested and antagonistic parents; in some cases the social worker or attendance officer may have to be brought in. In all these cases the teacher usually goes to the home for the conference. School systems, however, are beginning to tighten their requirements on parents. Too many parents, especially in large cities and in rural areas, refuse to assume any responsibility for providing for the physical, emotional, and intellectual needs of their children or for co-operating with the school. They produce the children, accept government aid in housing, feeding, and clothing them, and hold the school fully responsible for all their education.

The conference itself must be planned carefully. The following steps are suggested, although they of course should be modified, depending on the specific situation.

1. Make sure that the purpose of the conference is clear in your own mind, especially if you asked for it or it is regularly scheduled.

2. Set a definite time for the beginning and end of it. This is especially important when a series of conferences run consecutively; furthermore, it helps the teacher end a conference easily.

3. Arrange to have a quiet, comfortable room available, where you will not be interrupted. A classroom is not suitable unless everyone else can be kept out. A note on the door—"Conference in Progress"—may help.

4. Arrange the furniture so that the parents will be comfortable and will not sit facing the light.

5. Have no desk, table, or other barrier between you and the parents.

6. Before the conference, think over any pertinent information you may have about the student and his parents. If you are to report progress, be sure that all the information is at hand. When a homeroom or core teacher reports each student's progress and comparative achievements in all areas of school work, the necessary information must be collected.

Conducting the Conference

Observing the usual social amenities does much to make everyone feel comfortable. The following suggestions on getting a conference started take into account your already developed social skills.

1. Greet the parents in a friendly, natural way, and ask them to be seated.

2. Express your appreciation for their coming to the conference.

3. Help the parents feel free to talk with you. You might mention something attractive the mother is wearing, or she may be getting ready for Thanksgiving or Christmas or for an out-of-town trip—any of these may be used to open the conversation. Another excellent way to begin a conference is to show the parents their child's classroom or something he has made.

4. Get to the purpose of the conference. If the parents have asked to

see you, encourage them to state their reason soon after they arrive. If you have asked them to come in, tell them why. It is usually advisable to get to this point not more than five minutes after they arrive.

5. If the parents have asked to see you, let them talk without interruption until they have said everything they want to say. Nothing helps a person who is emotionally upset—be he parent, teacher, or student—to gain control of his emotions and to begin to think rationally about a problem more quickly than to have a sympathetic listener who does not interrupt. Getting rid of emotional tensions is better than suppressing them.

As was said earlier, many teachers dominate, cross-examine, or assume a patronizing manner. A conference is almost certain to have undesirable results unless the teacher listens graciously and admits inadequacies and possible errors.

Though the following suggestions pertain primarily to parent-initiated conferences for the discussion of problems, they are also of value for conferences in which reports of progress are given.

1. Point out the student's strengths and virtues before mentioning his weaknesses. Parents always feel better when they know that their child is doing well in something and has some strong points.

2. Reflect the parents' feelings in your remarks to them. If a parent says, "Jimmy isn't doing as well in school as he should," reply with "You think that Jimmy is not doing as well as he should" or a similar statement reflecting the parents' feelings. Do not say, for example, "I think that Jimmy is doing fine" or "Jimmy is a slow learner."

3. Use the parents' remarks and the feelings they express as a lead for your own remarks and questions. A parent who says, "Jimmy is not interested, but I want him to become an engineer," might be answered with "You think that you can interest him in engineering?" or "Do you think it wise for us teachers to continue trying to get Jimmy interested in engineering?" Avoid such responses as "I feel certain that Jimmy cannot become an engineer" or "Jimmy should make this decision himself."

4. Explain fully how progress or comparative achievement is assessed. Here samples of the student's work can be used to good advantage. As pointed out in earlier chapters, results on the same test administered at two different times, the student's actual work, recordings of him speaking or giving a musical performance, and the like are useful.

5. As needed, summarize the main points that are brought out. For example, "Jimmy is doing well in English and social studies, his work in geometry and chemistry has not shown much improvement, his attitudes toward the teachers and school are good"; or "Jimmy seems not to try in subjects he has no interest in, and as yet we have not found out how to get him interested in geometry and chemistry."

Ending the Conference

In concluding a conference, outline what action is to be taken as the result of it, or make plans for the next one. "You, Mr. Smith, are going to take Jimmy to the experimental laboratory and have him meet the head engineer. I will see Jim's geometry and chemistry teachers and inform them of our conference. In addition, here are some pamphlets describing the requirements for an engineering course. You may want to compare these with the work Jim seems to be able to do well and has shown interest in. Let's see how things work out and we will have another conference at the same time eight weeks from now, or sooner if you wish."

End the conference on an optimistic note. Although you feel sure that the parents' decision for Jim to become an engineer is unwise, do not say it. Instead, mention some of Jim's good qualities or the areas in which he is doing well.

ADMINISTRATIVE POLICIES

If teachers are to be effective in conducting conferences with parents, they must handle two problems well—the time for holding conferences, and coöperation from the entire school staff and from parents.

Should all parent-teacher conferences take place outside of regular class hours or are they important enough for the teacher to be allowed time for them during the regular school day? Agreement must be reached on this problem among the administration and teachers in each school, and the parents concerned. The final solution is important; but even more important is the fact that teachers, parents, and principal coöperate in the decision and that all or most approve it (Fig. 17.11).

A variety of arrangements can be worked out so that the homeroom, core, or other teacher can have at least one conference per semester with twenty-five to thirty-five parents. (1) On specific days teachers may be in their classrooms for half to three-quarters of an hour before

school begins or after it ends. Parents can thus come in either earlier or later; this arrangement often avoids interference with the father's job or the mother's schedule at home. (2) Classes may be dismissed completely half a day once a month for these conferences. (3) Occasionally cocurricular activities, whole-school assemblies, and the like may be scheduled at certain periods of the day and conducted by a few teachers, thus freeing most teachers for conferences. (4) Conferences may be scheduled in the evening. (5) A parent who is both interested and capable may take over the teacher's class during conferences. For example, the "Room Mother" program in the Crippled Children's School in Tacoma frees the teacher from the classroom while conferences are in progress. These procedures, alone or in combination, will work in any junior or senior high school without burdening anyone excessively when the administration, teachers, and parents want them to work. Most parents will be generous with their time, agree to school being dismissed for short periods, and coöperate in other ways with the school to attend parent-teacher conferences and learn about their children's progress.

Fig. 17.11. Meetings such as these are essential for the success of parent-teacher conferences. Agreements satisfactory to everyone concerned must be reached concerning the time, place, and number of such conferences (San Diego, California, City Schools Photo.)

Teachers must have the public and whole-hearted support of the entire school personnel—principal, administration, special teachers, and guidance people—if they are to carry through an effective conference program with parents. Honest disagreements about the reporting system and parent-teacher conferences are inevitable, and they should be discussed freely in meetings at the school but not in front of parents or other members of the community.

When such procedures are followed, parent-teacher conferences will

create better relationships between both teacher and pupil and home and school.

SUMMARY

Adequately reporting pupil progress has long been a perplexing problem for secondary-school teachers. Grading began when secondary education was not compulsory but was focused mainly on preparing high-school students for college, and it persists today, even though inadequate and often harmful to the learning situation.

In a good reporting system, progress in learning is of primary importance; comparative achievement is secondary. Some form for reporting comparative achievements in subject matter is desirable but not so essential as a measure of progress is. Progress toward several goals, rather than one, should be evaluated and reported. When the report covers only subject-matter knowledge and skills, too many students are denied an opportunity to experience success, even though they are making progress toward important individual goals.

Any reporting system must be understood by students, parents, and teachers. One that includes both progress and comparative achievements is likely to produce good student-teacher and home-school relations. The best written reports are more satisfactory when supplemented by parent-teacher conferences. In such a conference, some of the student's work can be shown to parents and discussed, and any problems related to the student's school life, his parents' questions, and the teacher's viewpoints can be clarified.

Questions and Activities

1. What are the major inadequacies of single letter grades for reporting to parents?
2. Why should the focus in reporting be upon the student's progress in learning?
3. Why should comparative achievement in subject-matter knowledge and skills be reported?
4. List the advantages of reporting comparative achievements in terms of thirds or fourths rather than in single letter grades. How could letter grades be used to classify students on this basis?

5. Why should progress toward several important objectives be reported rather than only subject-matter knowledge and skills?
6. How can the teacher and school make a written report meaningful to students, teachers, and parents?
7. Write a short critical evaluation of the report forms shown in Figs. 17.1, 17.5, and 17.8. What suggestions, if any, do you have for improving the Monona Grove report form in Fig. 17.8?
8. What effect can written reports have on teacher-pupil and home-school relations?
9. What advantages do parent-teacher conferences have over written reports?
10. Conduct a sociodrama in which parents who are extremely upset because their child received a low mark in citizenship discuss the mark with his teacher.
11. Conduct a sociodrama in which a teacher informs parents it is advisable to place their child in a special class.
12. Outline the main objections school people or parents might make to supplementing a written system of reporting with parent-teacher conferences.
13. For your subject-matter field, set up a combination written report system and parent-teacher conference schedule which you think would be practical and achieve the desired results.
14. Compare the Monona Grove report form with the one used in your high school or college.

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